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ABSTRACT

This report of a study which explored the effects of camera use among 30 children in a biracial multi-aged classroom includes suggestions for the application of the findings in early childhood curriculum. The first two chapters present the purpose, rationale, and measured results of an examination of camera use as a tool for inquiry and self-expression; five instruments were used to measure changes in self-concept, self/other relationships, visual and aural perception, intellectual capacity, academic achievement, pupil-teacher relationships, and pupils' attitudes towards school. Analysis of the data indicated that the 5- and 6-year-old subjects exhibited positive growth in academic performance and self concept, and that growth was the same for girls and boys and blacks and whites. It was also noted that on the academic performance measure called Circus, black girls and white boys had significantly larger gains than black males and white females. A 4-stage sequence of development of photographic skills is presented, and examples are provided of photography by young children to demonstrate the potential relationship of photography and the traditional skills taught to this age group. The role of parents and acquisition of materials and meeting technical needs are also covered. Samples of suggested activities are appended. (MER)

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USE OF CAMERAS IN AN EARLY CHILDHOOD CLASSROOM TO ENHANCE ACADEMIC AND SELF-CONCEPT GROWTH

by

Becky New

Winter, 1978

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INTRODUCTION

A characteristic need and potential for man is that of languaging. Languaging can be regarded as an outgrowth of a fundamental human need to relate to other humans, and a coping behavior that results in the invention of signs and symbols and the systematic use of those signs and symbols in communication. The capacity for languaging has resulted in body language, pictographs, sign languages, drama, opera, thousands of spoken languages, hundreds of written languages, computer languages, Morse code, and secret codes or ciphers of all kinds (Debes, 1975, p. 4).

Languaging, as an activity, as a sequential activity, has resulted in the creation of a large number of visible languages, or symbolic systems for representing the sequential sounds of spoken languages. Such visible languages are separate, but related to, the spoken languages. It is possible to become literate in both the spoken and the visual languages (Debes, 1975, p. 5).

Our schools commonly teach towards such a literacy, but there are other literacies of which man is capable. Some of man's earliest languaging activities resulted in the invention of sequential pictographic languages, hierglyphics, and even picture sequence languages. Verbal languaging makes use of sounds to transmit intended meanings; visual languaging makes use of visuals to say intended things (Debes, 1975, p. 8). In the world today, there is reliance on both the ability to visualize as well as verbalize. Rather than being regarded as competitors, they are in fact mutually supportive. Someone who has the ability to make a logical sequence of pictorial images will probably have less difficulty translating a vision or an idea into the symbolic realm of verbal language. Children can be encouraged to move from receiving a visual stimulus to creating their own visuals; to assign words to them, spoken first and then written; to translate from the objective fact of the image to the feelings and incipient behaviors implied (Fillion, 1973, p. 310).

In this visual/verbal world, a curriculum designed to help children become acutely visual will also broaden their options in learning and communication styles. If, at the same time, increased visual skills are integrated with the objectives of increased verbal skills, self-confidence, self-awareness, and environmental awareness, a more completely literate person evolves (Purvis, 1973, p. 716).

Hence, to be meaningful, a program in visual literacy must emphasize the relationship of visual languaging to all other languaging. There is no more advantage to being literate in visual languaging and being illiterate verbally than there is in being able to read and only having a television available.

> The way to be liberated from the constraining effects of any medium is to develop a perspective on it--how it works and what it does. Being illiterate in the process of any medium (language) leaves one at the mercy of those who control it. (Postman and Weingartner, 1969, p. 166)

But what is "visual literacy"? A definition as composed by members of the First National Conference on Visual Literacy is as follows:

> Visual Literacy refers to a group of vision-competencies a human being can develop by seeing, and at the same time, having and integrating other sensory experiences. The development of these competencies is fundamental to normal human learning. When developed, they enable a visually literate person to discriminate and interpret visible actions, objects and/or symbols natural or man-made that he encounters in the environment. Through creative use of these competencies, he is able to communicate with others. Through appreciative use of these competencies, he is able to comprehend and enjoy the masterworks of visual communication. (Williams and Debes, 1970, p. 14)

Debes (1969, pp. 25-27) delineates a heirarchy of eighteen specific skills needed to qualify as visually literate:

a. distinguish light from dark;

b. recognize differences in brightness and similarities in size and shape;

c. distinguish hues from grays and recognize differences and similarities in hue and saturation;

d. perceive distance, height, and depth and recognize differences and similarities in distance, height, and depth;

e. perceive movement and recognize differences and similarities in rates of movement;

f. recognize a whole shape even when partially occluded;

g. "read" simple body language and make simple body language utterances;

h. recognize groups of objects commonly seen together;

i. "read" a spatial arrangement of objects commonly seen together;

j. group objects related by process commonly seen together and group objects related by process though not necessarily seen together;

k. "read" a sequence of objects or body language arranged in chronological order and related by process and compose an utterance as above;

l. "read" a sequence of objects or body language arranged in an idealized order to represent elements of a process or genotype, and compose an utterance as above;

m. "read" a sequence of objects or body language arranged in cogent order, and compose an utterance as above;

n. "read" a sequence of objects or body language arranged in "original" yet "significant" order, and compose an utterance as above;

o. "read" a sequence of objects or body language arranged in order so as to communicate an intended idea about a process, and compose an utterance as above;

p. "read" a sequence of objects or body language arranged to communicate intended nonphysical concepts, and compose an utterance as above;

q. "read" a sequence of objects or body language arranged to transmit a fictional narrative, and compose an utterance as above;

r. "read" a sequence of objects or language arranged to create: (1) a desired emotional reaction, and (2) a personal emotion so that others may understand it, and compose utterances of the above.

The goal of developing each child's potential literacy in the use of visuals appears not only appropriate within an educational curriculum, but mandatory, if the overall educational objective is the development of the "whole child."

While this study did not begin with the intention to direct instruction toward the development of any one or all of the skills in the heirarchy, evidence of such development was apparent as photography became the medium of an increasingly literate message.

CHAPTER I

CAMERAS IN THE CLASSROOM: THE STUDY

Purpose

The primary objectives of this study were (1) to investigate the effects on five-, six-, and seven-year-old children of their use of cameras as a tool for inquiry and self-expression and (2) to consider the feasibility of integrating photography as an instructional aid into the early childhood curriculum. Specifically, the study investigated changes in self-concept, self/other relationships, visual and aural perception, and intellectual capacity. Academic achievement, pupil-teacher relationships, and pupils' attitudes toward school were also examined.

Rationale

Numerous tested techniques and procedures are available to teachers which will enhance a child's life in the classroom. The skills of the visually literate could be developed through the use of a variety of traditional classroom materials. Why, then, should any teacher be willing, much less eager, to provide cameras for use by children in the primary grades? Such an addition to the early childhood curriculum will certainly take up considerable class time, require more after school work by the teacher, and use up more of an already meager budget than would other special projects. Why? Because using a camera is exciting. It is personal. It offers a sense of challenge and creative discovery that never fails to generate enthusiasm among its practitioners. Rarely will a child turn down an opportunity to use a camera. The reverse, in fact, is usually true.

The value of using the camera in the classroom is not only "just for fun," however. The creative possibilities within the photographic medium offer a unique means of building on a child's natural curiosity about the environment. The camera provides children with a tool to observe, explore, select, and respond to personally significant aspects of their surroundings. The resulting images from such explorations have the potential to help a child appreciate and further develop his or her own special way of responding to the world through visuals. Through the viewing and

This is Regina Davis
She likes Allison and Rene
She likes to play in the dollhouse
She likes to dress up
She likes baby dolls
She likes to draw pictures

sharing of their photographs, children acquire skills in classifying, interpreting, discriminating, and reading visuals. The camera, therefore, makes a useful, practical contribution toward the maximum development of the human potential through nurturing and refining each child's visual skills.

In addition to being a valuable component of any program in visual literacy, photography is also now being recognized as a means of attaining other educational goals. Photography provides numerous opportunities for success, thereby enhancing a child's self-concept. This sharing of photographs among peers encourages dialogue not only about visuals, but about experiences and feelings as well; such group activities, therefore, foster more rewarding interpersonal insights. Furthermore, photographic activities are flexible, adapting readily to the needs of an individual as well as the entire class. Finally, photographic activities offer children choices they can handle, no matter what their level of intellectual development may be. The camera is, in that sense, a "great equalizer."*

Motivation for this study is illustrated by a description of the initial experience with using cameras in the classroom. Early in the school year, several inexpensive cameras were brought into a primary level classroom for use by 30 four-, five-, and six-year-old children. The cameras were to be used as part of a project on "Our Classroom," a unit designed primarily to assist the children in their efforts to become acquainted with one another as well as to encourage each child's feelings of pride and inclusion in the class group. Each was given at least one opportunity to use a camera during this initial project. Children photographed one another within and outside the classroom, quickly producing enough photographs to fill several scrapbooks, revealing undreamed-of potential in this simple technique.

Stimulated to seek additional avenues for exploration with this exciting new medium as well as to extend the classroom project, a problem was posed to the class: *What if someone who had never been to our school wanted to know more about it? How could we let someone know what it is like at P. K. Yonge?* A number of solutions were suggested: *Invite them to come to school. . . . Draw a picture of the school. . . . Tell them about it. . . . SHOW THEM THE PICTURES WE TOOK!*

The suggestion to share the photographs was followed by immediate enthusiasm and agreement, as well as the desire to take more photographs. *Our pictures are just of us and our room. Our school is big. We will have to take a picture of the flag . . . and the creek . . . and the playground . . . and the coach . . . and the lunchroom!* The class project which resulted from this animated discussion involved every child in the room and was a major influence on the class curriculum for the remainder of the school year, eventually culminating three years later in the study described in this monograph.

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* Informal conversation between Ms. New and Dr. Robert Ziller, University of Florida, Gainesville (Circa, 1975).

I used to be afraid to go to the library.
Now I'm not. Miss Ferguson is nice.
She let us check out 3 books.

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As the class was divided, with some help from the teacher, into groups with particular responsibilities related to showing "What P. K. Yonge Is Like," seven-year-old Bobby joined two others in the "Important People at Our School" group. Bobby usually responded to assignments or group activities with, *I don't wanna.* However, with a camera Bobby had succeeded in winning some badly needed peer acclaim for his photographs of classmates. Perhaps he was also motivated to participate because of the way the camera had been presented to the class in the first place. Allowing him to use it meant, *You're responsible! You're capable! You can do it!* Whatever the reason, Bobby enthusiastically joined Nancy and Billy in making a list of "important people" to be photographed.

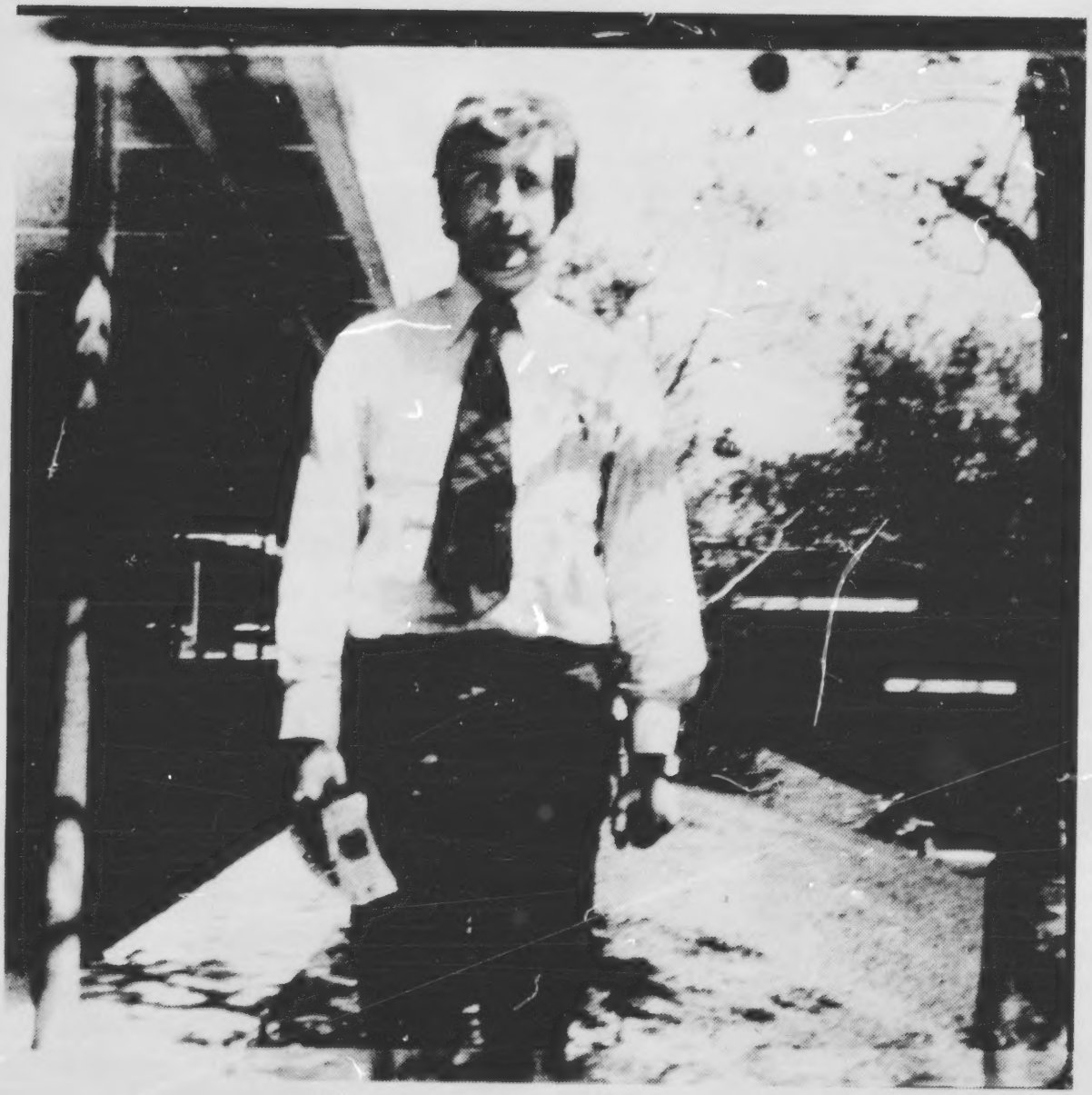
Bobby had explored the campus on numerous occasions and had been a frequent visitor to the counselors' offices, in part as a result of his difficulties in working and playing cooperatively with other children. He, therefore, knew many names of the counseling and administrative staff, and was eager to elaborate to his group why this or that person was important. Because of his credibility, Bobby became the unofficial, yet clearly recognized, leader of the group.

For the next two days, after completing their daily classroom responsibilities, the threesome went about the school sharing a camera and several rolls of film, as did other small groups of children working on the "project." Although Bobby's group had not previously spent much time together, they were able to work cooperatively on this project with no difficulties. Bobby could not read the names on their list, but he was eager to photograph. Both Nancy and Billy could read but were reluctant to approach the adults with whom they were unfamiliar. They both helped Bobby read the names off the list one at a time, and Bobby was observed offering advice and encouragement to the hesitant photographers, noting, *Sure you can do it. If I can do it, you can do it!*

Each afternoon the threesome returned to the classroom to share their excitement about something they had seen or learned as they went about the school in search of the people on their list. Nancy and Billy told their classmates about all of the people Bobby knew in the office, and Bobby bragged on his new friends for being "brave" in their picture-taking endeavors.

On the third day of the project, Bobby came to school with a limp and a note from his mother, explaining that he had hurt his foot the evening before. It was suggested to Bobby and his group that they either wait a day to finish, or that Nancy and Billy take the remaining photographs without Bobby's assistance. Neither option was satisfactory to Bobby and his group. Bobby insisted that his foot did not hurt that much, and Nancy suggested that they would let Bobby rest if his foot bothered him. Bobby was thrilled to hear Billy insist, *If Bobby doesn't help, it just won't be the same.*

Bobby and his group resumed their task, therefore, and when they returned, not only did Bobby seem to have forgotten about his leg, but he reported excitedly, *I took some real pictures!* When questioned as to



Dr. Fox is nice, too. He said we could come back and see his office.

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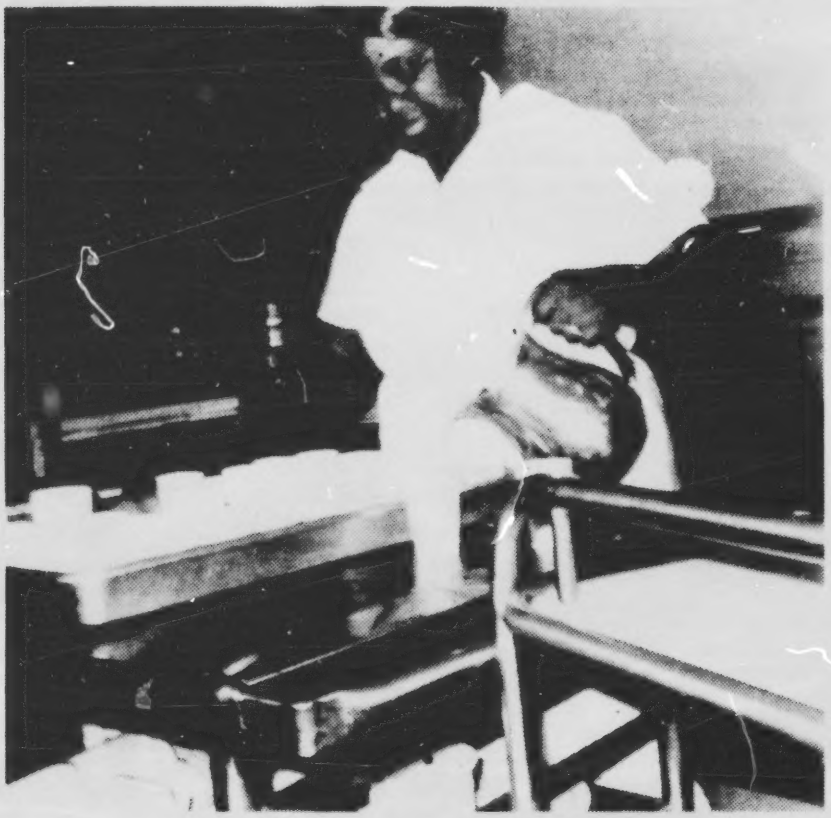
what he meant by "real", Bobby said that he couldn't explain, *You'll have to wait and see the photographs.*

When the images were returned to the groups the following day, Bobby pointed out his "real" photographs. Those turned out to be the ones in which the subject, instead of posing and smiling for the camera, was busy at work in his or her natural environment, apparently unaware that a photograph was being made. As Bobby's group later shared their photographs with the rest of the class, the term "real" was adopted to refer to any candid photograph which seemed to show the situation or subject as it "really" was.



This is a REAL picture, 'cause Mrs. Clark didn't even know about it 'til after the flash went off. She was pouring juice getting ready for lunch.

One photograph among the "important people" pictures was of Bobby, standing in front of the garbage dumpster. Bobby explained his presence in the photograph by noting that it should have been the janitor. *He's important because he keeps our school clean.* Since the janitor only comes to the school at night, Bobby explained, *I took his place*!

This is me being the janitor.

Needless to say, the finished product--the scrapbook of "Our Day at P. K."--was a proud possession, belonging to the entire class and serving as a graphic reminder of the many good things which came out of that week of photographing. In Bobby's case, he made contact with adults on a positive basis, rather than as an outcome of some discipline problem. Furthermore, he finished a job; he set standards for himself, and he worked hard. Besides making the visual/intellectual distinction between a "real" photograph and a posed one, he worked out a way to create a visual symbol to represent the missing janitor. Equally important, he made two friends who shared in the praise and recognition bestowed by the entire class on the results of the effort the three put into completing the project.

Not only did Bobby receive overwhelmingly positive response from his peers, but he also learned how to work cooperatively in a group. Through sharing his photographs, he was able to communicate his feelings and ideas to a receptive audience, thus taking an important step toward becoming a contributing member of his peer group. Because of his desire to be able to read the names of the people on his list, he became more aware of the value of reading and began to show a new willingness to work on his reading skills, especially when the reading material was related to his photographs!

Bobby and his two friends were not the only ones to gain from their experiences with photography. The entire class enjoyed the opportunity to work together on a project of their own making. They improved in their ability to listen and take turns as they shared their photographs with each other; they discovered more about themselves and each other; they learned more about their school environment, its uniqueness and its special significance to them; AND . . . they began to think of more ways to use the camera in the classroom.

Throughout the next three years, children in this early childhood classroom continued to work, play, and explore with cameras. Each successive experience reinforced the belief (1) that involvement in photography could help children become more aware of who they are and why they are special, to feel better about what they can do, and to become more successful partners in relationships with peers as well as with adults; (2) that activities including the use of a camera assist in the development of perceptual skills as well as the enhancement and integration of numerous other cognitive skills; (3) that with this hands-on, "grown-up" tool, children are eager to participate in any and every photo activity; and (4) that the pupil/teacher relationship can be continually enhanced as child and teacher share photographs together. Finally, photography proved to be a fascinating and consistently effective means of enhancing life in the classroom and assisting in the attainment of basic goals in early childhood education, both affective and cognitive.

Ultimately, this exploration led to the study conducted during the 1975-1976 school year and described in this monograph.

Measured Results

Subjects in this study were thirty five-, six-, and seven-year-old children grouped heterogeneously in a multi-aged classroom. Students were randomly assigned to the classroom from a pool of students in the school of these age levels. Assignments were stratified by race, sex, and parental income.

During the study the subjects were served by one early childhood teacher and a part-time aide. Instamatic cameras were made available primarily through loans from cooperative, courageous parents willing to share their cameras for the school year. Four of the cameras were property of the classroom, having been purchased out of the regular classroom budget.

The formal data collection and analysis sought answers to five questions:

1. Is there a positive change in the academic performance among five- and six-year-old children who use cameras in the classroom?

2. Is there a positive change in self-concept among five- and six-year-old children who use cameras in the classroom?

3. Are the changes in academic performance and self-concept different for girls and boys?

4. Are the changes in academic performance and self-concept different for blacks and whites?

5. Is there an interaction between sex and race on the measures of academic performance and self-concept?

Five instruments were selected to measure the effects of using the cameras. These were the Circus instrument, the Stanford Early School Achievement Test (SESAT), the Slosson Intelligence Test, the Ziller Self-Concept measure, and the Photographic Self-Concept measure. The first three measured changes in academic performance; the last two tested for growth in self-concept.

Circus

The Circus instrument measures a student's ability to think things through, to compare look-a-likes, and to see and remember. The section on thinking things through is further broken down into the categories of problem identification, classification, solution evaluation, and a total score; the look-a-like section is divided into the categories of complex matching, reversals, and a total score. Educational Testing Service published the Circus instrument and has determined validity and reliability coefficients.

Stanford Early School Achievement Test

The SESAT provides four scores. These scores are titled as follows: environment, mathematics, letters and sounds, aural comprehension, and a total score. The environment subscore concerns the social and natural sciences; mathematics stresses quantitative concepts; letters and sounds tests for letter recognition and auditory perception; and aural comprehension concerns inferential judgments in short narrative passages read aloud. Harcourt, Brace, Jovanovich, Inc. publishes the SESAT and has determined validity and reliability coefficients.

Slosson Intelligence Test

The Slosson Intelligence Test is a measure of I.Q. It stresses mathematical reasoning, vocabulary, auditory memory, and information. It is designed to be a brief individual test of intelligence. Slosson Educational Publications is the test's publisher and has determined validity and reliability coefficients.

Ziller Self-Concept Measure

The Ziller Self-Concept measure examines a student's attitude towards self and teacher. Four categories are measured. They are: self-esteem, openness, complexity, and distance from teacher. It is a pencil and paper test administered on a one-to-one basis. The instrument was developed by Robert C. Ziller of the Department of Psychology, University of Florida. Reliability and validity coefficients are not available.

Photographic Self-Concept Measure

The Photographic Self-Concept measure examines a student's self-perceptions through photography. Photographs taken by the students themselves are coded using a category system. The categories are parents and siblings, people, self, friends, school, aesthetics, repetitions, activities, smiles, and books. If a subject included one or more photographs involving one of these categories, a score of the total number was assigned for the category. If no photographs of the category were included, a score of zero was assigned. This self-concept test was developed by Becky New (P. K. Yonge Laboratory School, University of Florida) and Robert C. Ziller (Department of Psychology, University of Florida). Validity and reliability coefficients have not been determined

other than interrater reliability for the present project. For each category, 75 percent agreement was required from among four university student judges.

Data Collection

During the beginning of the 1975-1976 school year, all students in the sample were pretested with the Circus, Stanford Early School Achievement Test, Slosson Intelligence Test, and Ziller Self-Concept measure. In the spring, they were posttested on these four instruments. All tests were administered individually except for the Stanford Early School Achievement test. It was administered in small groups.

The Photographic Self-Concept measure was administered during the spring of 1976. Each child in the class photographed between 10 and 12 pictures which described themselves. The pictures were judged using the criteria of New and Ziller. Four university students served as judges. Minimal agreement was set at 75 percent (or three out of four judges).

Data Analysis

Multivariate analysis of variance (MANOVA) was used to analyze those instruments having more than one score or subscore. These instruments were the Circus, the Stanford Early School Achievement Test, the Ziller Self-Concept measure, and the Photographic Self-Concept measure. For each set of subscores, the independent variables were sex and race with the covariate being age of the student. For the Circus, Stanford Early School Achievement Test, and the Ziller Self-Concept measure, gain scores were the dependent variables. For the Photographic Self-Concept measure, the raw scores were the dependent variables.

Univariate analysis of variance (ANOVA) was used to analyze the Slosson Intelligence Test. The mental gain score was the dependent variable; sex and race were the independent variables; and the covariate was chronological age.

All academic and self-concept measures (the dependent variables), on which pre- and posttest scores were available, were analyzed using t-tests. The paired samples (or repeated measures) method was employed in the analysis.

Descriptive statistics were found for all dependent variables for all students and by the categories of sex and race. These statistics include n's, means, and standard deviations.

Results

The results of the statistical analysis of the data are presented in this section. Each question is stated and followed by an interpretation in relation to the question and, then, by the statistical results in support of the interpretation.

1. *Is there a positive change in the academic performance among five- and six-year-old children who use cameras in the classroom?*

This question was investigated by examining the results on the Circus, the Stanford Early School Achievement Test, and the Slosson Intelligence Test. Each mean change score for the three instruments is presented in Table 1. Each change score, the mean pretest and posttest scores, the degrees of freedom, and the value of the test of significance (t-test for repeated measures) are provided.

TABLE 1

Mean Change Score, Pre- and Posttest Scores, Degrees of Freedom, and t-Values for Measures of Academic Performance

Measuring Instrument and Subscores	Mean Change	Mean Pretest	Mean Posttest	df	t
Circus					
Think It Through					
Problem Identification	0.56	4.20	4.76	29	2.43*
Classification	1.93	12.00	13.93	29	3.71*
Solution Evaluation	0.60	7.73	8.33	29	2.38*
Total	3.10	23.93	27.03	29	4.56*
Look-A-Like					
Complex Matching	1.50	10.26	11.76	29	3.38*
Reversals	-0.56	0.96	0.40	29	2.73*
Total	2.10	22.50	24.60	29	4.37*
See and Remember	1.10	16.71	17.82	27	2.42*
SESAT					
Environment	1.75	28.83	30.58	11	1.43
Mathematics	11.83	36.83	48.66	11	4.32*
Letters and Sounds	6.08	30.25	36.33	11	3.72*
Aural Comprehension	2.41	19.00	21.41	11	2.45*
Slosson	13.55	87.51	101.06	28	6.91*

*$p < 0.05$

It appears that a positive change did occur in the academic performance among five- and six-year-olds who used cameras in the classroom, since, in each case, subscores on all four instruments were modified in a positive direction except the change score for the reversal subscore of the Circus. In this instance, however, it must be noted that the negative direction is actually "positive" since progress in indicated by a decrease in the number of numbers and letters the child reverses. In other words, subtracting the high number (0.966) on the pretest from the low number (0.400) on the posttest yields a negative change (-0.566). All posttest scores on the Circus, Stanford, and the Slosson were not merely greater than the pretest scores but were statistically significantly greater than the pretest scores ($p < 0.05$), except for the environment subscore on the SESAT which, to repeat, was, however, in a positive direction.

The cumulative probability on the six subscores of the Circus was 0.083. For the three significant subscores (mathematics, letters and sounds, and aural comprehension) of the SESAT, the cumulative probability was 0.037. The exact probability on the Slosson Intelligence Test was less than 0.001.

2. *Is there a positive change in self-concept among five- and six-year-old children who use cameras in the classroom?*

This question was investigated by examining the results on the Ziller Self-Concept measure and the Photographic Self-Concept measure. Each mean score for the Ziller Self-Concept measure is presented in Table 2. Each change score, the mean pretest and posttest scores, the degrees of freedom, and the value of the test of significance (t-test for repeated measures) are provided.

TABLE 2

Mean Change Score, Pre- and Posttest Scores, Degrees of Freedom, and t-Value for the Ziller Self-Concept Measure

Ziller Self-Concept Subscores	Mean Change	Mean Pretest	Mean Posttest	df	t
Self Esteem	0.12	4.24	4.36	24	0.20
Openness	1.96	3.84	5.80	24	2.10*
Complexity	-1.24	11.96	10.72	24	1.87
Distance from teacher	0.04	3.88	3.92	24	0.05

*$p < 0.05$

The results of the Photographic Self-Concept measure are presented in Table 3. Means and standard deviations for each subscore are given. Analysis indicates the conclusion that a positive change in self-concept occurred among five- and six-year-old children who used cameras in the classroom.

TABLE 3

Mean Scores and Standard Deviations for the Photographic Self-Concept Measure (n=13)

Photographic Categories	Mean	Standard Deviation
Parents and Siblings	3.76	2.86
People	7.30	2.56
Self	1.07	1.60
Friends	1.92	2.53
School	2.15	3.60
Aesthetics	0.84	0.98
Repetitions	2.07	1.93
Activities	3.61	0.43
Smiles	4.38	1.65
Books	0.23	1.50

For the Ziller Self-Concept measure, there was a positive change for all subscores except for the complexity score. The complexity subscore is appropriately negative since it indicates that a child has a clearer understanding of himself or herself in relation to his or her environment. In other words, the data indicate that the child perceives himself or herself as dominant rather than subservient to the environment. Of the four subscores, the one subscore of openness resulted in a posttest score significantly larger ($p < 0.05$) than the pretest score. The exact probability was 0.046.

For the Photographic Self-Concept measure, the means revealed that, on the average, each child had photographs in eight of the ten categories. Means of less than one were calculated for the categories of aesthetics and books. Since the photographs were taken in the last quarter of the school year, the fact that all children, on the average, photographed eight of the ten categories reinforces the positive data obtained from the Ziller Self-Concept measure.

3. *Are the changes in academic performance and self-concept different for girls and boys?*

Question three was investigated by examining the multivariate (MANOVA) and univariate (ANOVA) analysis of variance results on the Circus, SESAT, Slosson, Ziller, and Photographic measures. The MANOVA results are presented in Table 4.

TABLE 4

Multivariate Analysis of Variance (MANOVA)
Results for Four Test Instruments[a] Considering the Effects of
Sex and Race While Adjusting for the Covariate of Age

Test Name and Sources of Variance	df	Hotelling-Lawley F Approximation
Circus		
Sex	6,18	1.66
Race	6,18	2.32
Sex x Race	6,18	5.70*
SESAT		
Sex	4,3	1.50
Race	4,3	0.19
Sex x Race	4,3	0.76
Ziller		
Sex	4,16	1.65
Race	4,16	0.81
Sex x Race	4,16	2.08
Photographic		
Sex	10,3	2.13
Race	10,3	1.93
Sex x Race	10,3	1.47

[a] The Slosson is not included since it has one dependent variable.

* $p < 0.05$

None of the instruments analyzed by MANOVA procedures resulted in an overall sex effect. This seems to indicate that no differences exist in gains made by girls and boys in academic performance and self-concept. In other words, sex does not appear to be a factor. The univariate results further emphasize this implication (see Table 5). Of the 25 subscores analyzed, in but one instance was a significant difference between girls and boys demonstrated. This occurred on the

TABLE 5

Univariate Analysis of Variance (ANOVA) Results for Five Test Instruments (With Independent Variables of Sex and Race and Covariate of Age) for the Variable Sex

Test Name and Source of Variance	df	SS	F
Circus			
Think Things Through			
Problem Identification	1,23	2.42	1.59
Classification	1,23	14.15	1.73
Solution Evaluation	1,23	0.00	0.00
Look-A-Likes			
Complex Matching	1,23	1.32	0.34
Reversals	1,23	0.51	0.53
See and Remember	1,23	1.86	0.33
SESAT			
Environment	1,6	2.36	0.12
Mathematics	1,6	5.45	0.10
Letters and Sounds	1,6	20.77	2.28
Aural Comprehension	1,6	20.77	1.39
Slosson	1,24	12.13	2.61
Ziller			
Self-Esteem	1,19	0.00	0.00
Openness	1,19	0.74	0.05
Complexity	1,19	0.86	0.07
Distance from Teacher	1,19	41.62	3.22
Photography			
Parents and Siblings	1,9	0.78	0.08
People	1,9	4.20	0.58
Self	1,9	0.67	0.02
Friends	1,9	12.47	2.07
School	1,9	3.88	0.30
Aesthetics	1,9	0.54	0.68
Repetitions	1,9	3.96	0.28
Activities	1,9	14.47	7.13*
Smiles	1,9	0.20	0.07
Books	1,9	0.15	0.03

* $p < 0.05$

activities subscore of the Photographic Self-Concept instrument. Boys photographed more pictures depicting activities ($\bar{x}$ = 4.00) than did girls ($\bar{x}$ = 3.14). The F-value is 7.13 with 1 and 9 degrees of freedom.

4. *Are the changes in academic performance and self-concept different for blacks and whites?*

Question four was investigated by examining the MANOVA and ANOVA in an overall race effect. This seems to indicate that no differences exist in gains made by blacks and whites in academic performance and self-concept. The univariate results further emphasize this implication (see Table 6). Of the 25 subscores analyzed, in only two instances was a significant difference between blacks and whites demonstrated. These were on the solution evaluation subscore of the think-things-through section of the Circus instrument and the letters and sounds subscore of the SESAT. In both cases, blacks demonstrated significantly larger gains than did whites. For the solution evaluation subscore, blacks had a gain of 1.85 and whites, 0.21. The F-value is 13.72 with 1 and 23 degrees of freedom. The pre- and posttest scores for blacks were 5.85 and 7.71, respectively, and for whites, 8.30 and 8.52. For the letters and sounds subscore, blacks had a gain of 9.00 and whites, 5.11. The F-value is 6.90 with 1 and 6 degrees of freedom. The pre- and posttest scores for blacks were 18.33 and 27.33, respectively, and for whites, 34.22 and 39.33.

TABLE 6

Univariate Analysis of Variance (ANOVA) Results for Five Test Instruments (With Independent Variables of Race and Sex and Covariate of Age) for the Variable Race

Test Name and Source of Variance	df	SS	F
Circus			
Think Things Through			
Problem Identification	1,23	0.15	0.75
Classification	1,23	6.54	0.80
Solution Evaluation	1,23	13.00	13.72*
Look-A-Likes			
Complex Matching	1,23	10.39	1.83
Reversals	1,23	10.33	2.54
See and Remember	1,23	2.50	2.67
SESAT			
Environment	1,6	2.17	0.11
Mathematics	1,6	112.83	2.06
Letters and Sounds	1,6	62.98	6.90*
Aural Comprehension	1,6	0.23	0.02
Slosson	1,24	5.01	1.08
Ziller			
Self-Esteem	1,19	1.17	0.14
Openness	1,19	65.87	4.04
Complexity	1,19	4.37	0.34
Distance from Teacher	1,19	26.74	2.07
Photography			
Parents and Siblings	1,9	1.53	0.16
People	1,9	5.53	0.77
Self	1,9	0.37	0.14
Friends	1,9	10.50	1.75
School	1,9	12.63	0.97
Aesthetics	1,9	0.56	0.71
Repetitions	1,9	24.88	1.77
Activities	1,9	10.32	5.09
Smiles	1,9	0.02	0.00
Books	1,9	0.01	0.03

* $p < 0.05$

Hence, it appears that except for the solution evaluation subscore of the Circus and the letters and sounds subscore of the SESAT, no differences in changes occurred in academic performance and self-concept for blacks and whites. Race, then, does not appear to be a factor.

5. *Is there an interaction between sex and race on the measures of academic performance and self-concept?*

Question five was investigated by examining the MANOVA and ANOVA results on the Circus, SESAT, Slosson, Ziller, and Photographic measures. The MANOVA results are presented in Table 4.

Of the instruments analyzed by MANOVA procedures, one revealed an overall sex-by-race interaction. This was on the Circus instrument. The F-value is 5.70 with 6 and 18 degrees of freedom. Univariate results reflect this same find (see Table 7). On three of the six subscores of the Circus, there were significant sex by race interactions. The three subscores with significant interactions are the following: solution evaluation ($F = 15.02$ with 1 and 23 degrees of freedom), reversals ($F = 14.60$ with 1 and 23 degrees of freedom), and see and remember ($F = 7.23$ with 1 and 23 degrees of freedom). In addition, the openness subscore on the Ziller Self-Concept measure resulted in a significant interaction. The F-value is 6.30 with 1 and 23 degrees of freedom. Post hoc testing on each of these four subscores was conducted using the procedure of Scheffé. On each subscore, black females and white males showed significantly higher gains than did black males and white females.

TABLE 7

Univariate Analysis of Variance (ANOVA) Results for Five Test Instruments (With Independent Variable of Sex and Race and Covariate of Age) for the Interaction of Sex and Race

Test Name and Source of Variance	df	SS	F
Circus			
Think Things Through			
Problem Identification	1,23	0.02	0.01
Classification	1,23	0.33	0.04
Solution Evaluation	1,23	14.23	15.02*
Look-A-Likes			
Complex Matching	1,23	15.01	2.65
Reversals	1,23	56.57	14.60*
See and Remember	1,23	6.99	7.23*
SESAT			
Environment	1,6	2.03	0.11
Mathematics	1,6	209.37	3.82
Letters and Sounds	1,6	2.16	0.24
Aural Comprehension	1,6	10.25	0.69
Slosson	1,24	7.38	1.57
Ziller			
Self-Esteem	1,19	23.40	2.79
Openness	1,19	102.81	6.30*
Complexity	1,19	2.75	0.21
Distance from Teacher	1,19	21.30	1.65
Photography			
Parents and Siblings	1,9	21.28	2.31
People	1,9	0.21	0.03
Self	1,9	4.83	1.83
Friends	1,9	13.68	2.28
School	1,9	31.48	2.43
Aesthetics	1,9	4.09	5.10
Repetitions	1,9	3.65	0.26
Activities	1,9	4.99	2.46
Smiles	1,9	7.07	2.56
Books	1,9	0.23	0.58

* $p < 0.05$

Hence, an interaction between sex and race appears to exist, especially for the academic performance measure called the Circus.

Summary of the Results

In summary, clear evidence indicates that the five- and six-year-old children who used cameras in the classroom exhibited positive growth in academic performance and self-concept. Evidence was gleaned from the results obtained from three measures of academic performance (the Circus, Stanford Early School Achievement Test, and Slosson Intelligence Test) and two measures of self-concept (the Ziller Self-Concept and Photographic Self-Concept measures). Further, growth was found to be the same for girls and boys and for blacks and whites. While this was true, it is intriguing to note that on the academic performance measure called the Circus, black girls and white boys had significantly larger gains than did black boys and white girls.

CHAPTER II

THE YOUNG CHILD AS A PHOTOGRAPHER

To approach appreciation for the potential impact of the use of cameras by young children in their school curriculum, a review of the general nature of children in early school years may be helpful. The subjects used in this study were pupils in a heterogeneous, multi-age classroom of kindergarten and first graders. At any one time during the school year, there were children of at least three age groups. As they entered in September, ages ranged from four to six years. By January, all were between five and seven years old.

Any such mixed group of youngsters will likely exhibit a range of abilities, interests, and needs even wider than the chronological span. A few children may not be toilet trained. Some come to school with several years of nursery school behind them, perhaps already knowing how to read, write, and tie their shoes. Some cry when their parents leave them at the classroom door, while others walk to school alone the first day. One child spends that first morning alone in the sandbox, talking out loud, frowning and moving away if someone else attempts to join in. A classmate brings a ball to school, quickly gathering several other children together to play. A classroom with this variety of social, emotional, and physical maturation is not unusual, even in a traditional kindergarten or first grade. In a multi-age classroom, this range is inevitable.

The American five-year-old has acquired, however, a number of skills in reading visuals. Most Western pre-schoolers have become deliberate TV viewers by the time they are three years old and, consequently, quite accustomed to relying heavily on their visual sense for both entertainment and information. Most young children consistently recognize and respond to such visual symbols as a smile, a frown, a finger on the lips, a restaurant marquee. By the time a six-year-old is ready to learn to read symbols for words, he or she has had years of experience in reading visual symbols for ideas and feelings.

When the young child enters school, therefore, the ability to "see" is assumed, and the use of the visual sense is rarely challenged further than the need to distinguish between b's and d's ; p's and q's. Nevertheless, it is becoming increasingly clear to many that each child has as much potential for further development of his or her visual skills as any other cognitive capacity. Each child needs help in acquiring a more discriminating visual sense, as well as many opportunities for the active use of visuals as a means of communicating ideas, thoughts, and feelings--as a transmitter as well as receiver of images.

A child's development as a photographic image-maker appears to proceed through several stages concurrent with an increased visual acuity. The sequence of stages has been observed in both structured and unstructured photographic experiences of young children, each stage characterized not so much by any specific visual skills or technical abilities, but by the changing attitude toward the photographic process and the resulting images. The first stage is characterized by a global response to the environment, with undifferentiated use of the camera simply for the thrill, excitement, and the fun of taking pictures. Subsequent stages reflect the child's increasingly skilled and personal involvement with image-making, using photography as a means of expressing more complex, highly individualized responses to the environment.

While the examples presented came from photographic experiences with four-, five-, and six-year-old children, it is likely that anyone who becomes involved with photography will go through some version of the following developmental sequence as he or she grows in the ability to create personally significant images which can be meaningfully shared with others.

Stage I

Most young children respond to their first experiences in photography with an enthusiasm and curiosity directed towards the camera. The experience is primarily in the sensory-motor mode. While there may be some uncertainty with regard to *Which button do you push*? the young child is usually eager to hold the camera, impatient and often inattentive to directions which go beyond the basic requirements of looking through the viewfinder and pushing the button. The child rarely asks questions, brushing aside instructions with *I know how. I can do it myself*! As soon as he or she is alone, the young child becomes immediately engrossed in exploring the physical properties of the camera, regulating the focus, listening to the "click" of the shutter, winding the film, and checking the number appearing in the exposures-remaining window in the back of the camera.

The use of the camera--the very act of looking, clicking, winding--is the source of the young child's excitement at this level. Many children, in fact, appear to derive much pleasure just from carrying the camera around and looking through the viewfinder, although most will "shoot" all of the exposures on the roll of film as quickly as possible. Further, unless the camera is an "instant-picture" type, the child will probably ask for another roll of film even before inquiring about *When will the pictures come back?* Even if it is an instant-picture camera, the child will often prefer to give the first images away rather than relinquish the turn with the camera.

If questioned about what was photographed, the child's answer might be a wave of the arm towards the playground, or the name of whomever happened to be near when the "shooting" first began. The interest is in the use of the camera, and the subject does not matter! As further indication of the lack of involvement with the resulting images, the beginning child-photographer frequently fails to recognize the printed photographs when they are returned even as soon as the following day.

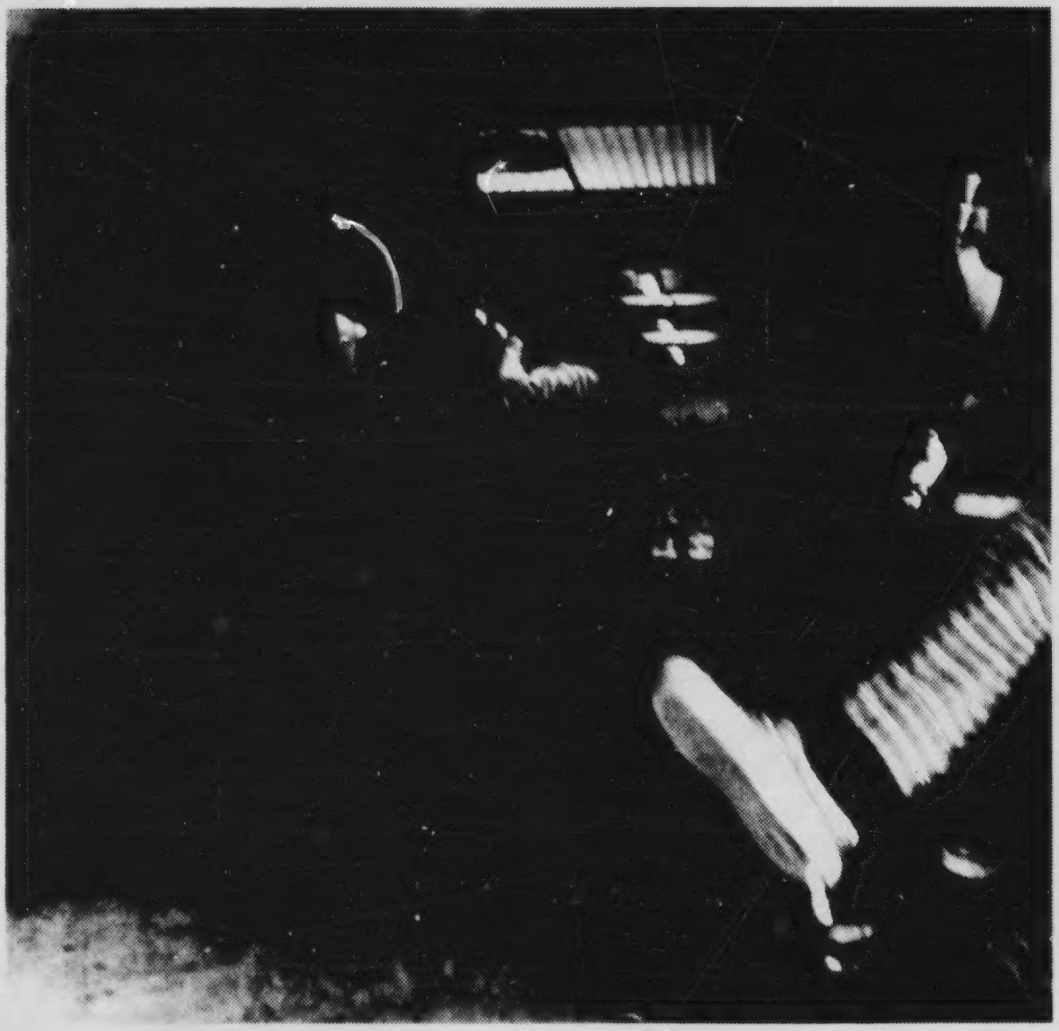
No, I don't think this is my picture.

If the images are recognizable, the child usually flips through them quickly, naming the subject in each, appearing happy and pleased with all of them in general, but none of them specifically. The child's response to the photographs is usually one of pride, but not because of any perceived quality in the results. The photographs are valued because of what they represent--tangible evidence of the ability to use the camera. They are "proof" of being responsible.

I took this picture all by myself!

I couldn't have taken this picture.
It's not a picture of <u>anything</u>!

Rarely does a young child make any qualitative distinctions among those first images unless, perhaps, the photographs are so completely blurred or underexposed that they are unrecognizable and *don't even look like pictures*! In such instances, the child will probably be more receptive to a discussion regarding photographic properties, such as the necessity of some light to make an image, or to photographic techniques, such as what happens if the camera or subject is moving when the shutter is "clicked". Otherwise, the relationship between the process and the product is of little or no concern to the beginning photographer. The verbal responses at this stage are usually about how much fun it was to take the pictures, and *Can I do it again tomorrow?*



Well, this was going to be my brother, but I guess he moved or something.

It is entirely possible, and perhaps advantageous within the limitations of a tight budget, for the young child's first few experiences in photography to be with an unloaded camera. In this way, the child can experience, without restraint, the excitement, pride, curiosity, and sense of responsibility which occur with the use of a tool regarded as "serious business." The child can enjoy the tactile qualities of turning, clicking, winding, and holding the camera without hearing a teacher caution, *Don't waste the film*!

At this first stage of involvement with the simple pleasure of using the camera, it certainly would not be appropriate for the teacher to set up any arbitrary goals or expectations regarding the resulting photographs. Even if encouraged to photograph "Things Joey Likes," the child will probably be unable to limit photographing to any pre-determined list of objects, because what Joey likes right now is just to use the camera! And what he--and any child at this first stage--needs are numerous opportunities to explore the "feel" of the camera without assignments to hinder the experience. The role of the teacher at this stage is to support the child's photographic efforts with enthusiasm. In addition, through the regular feedback of the resulting photographs, the teacher can help each child realize that he or she is not only capable of using the camera successfully, but that the resulting images are the products of his or her own activity--that the child does have some control over what those resulting images are all about.

Obviously, many children will have passed this stage by the time they are in school. Most families now have cameras, and many children have had previous opportunities to take photographs before coming to school. Even with adults, however, the first opportunities to use a new or different camera are often typified by this kind of enthusiasm for "playing" with the camera to see what it can do. Such exploration of the physical properties of photographing should be respected and encouraged.

Stage II

Subsequent to the initial satisfaction with this "hands-on" experience of using the camera, the child begins to show more interest in the results; attention now moves beyond the camera to the search for suitable subjects. As the child continues to look through the viewfinder, he or she is automatically encouraged to discriminate among all the things which are visible in order to select the event, person, place, or thing which he or she wishes to photograph.

Now, rather than being impressed with what the <u>camera</u> can do, the child's enthusiasm results from what the camera enables the <u>photographer</u> to do--confront any aspect of the environment regarded as interesting

and important. For children with prior experiences with photography, and especially for older children, their first experiences with the camera in the classroom may reflect entry at this level of involvement.

My dad is a policeman. These are his guns.
He has to have guns to protect himself.

Frequently, as the young child begins to be more selective about what to photograph, he or she will verbalize this new sense of control over the environment, even if the subject is inanimate: *I will take a picture of you . . . and you . . . and this . . . and that*! This pleasure often continues even after the roll of film is fully exposed and the camera has been put away. The child continues confronting new subjects, holding an imaginary camera while boldly asserting *Smile! Now, I'm going to take a picture of you! Click!*

The child now begins to focus both thoughts and the camera on something specific, not just whatever happens to be available. The resulting photographs--of prized possessions, family, and friends--become prized possessions themselves. Now, the subject matters, and the photographer eagerly awaits the development and return of the images. The child's satisfaction at this stage derives from the pleasure not only of the experience of using the camera, but also the thrill of taking a picture of someone or something special. Each of the resulting photographs is important now for different reasons and provides the child with more concrete, tangible means of sharing something personal. This "something" is often, again, "proof"--this time, of an experience, a place, or a relationship between the child and the subject.

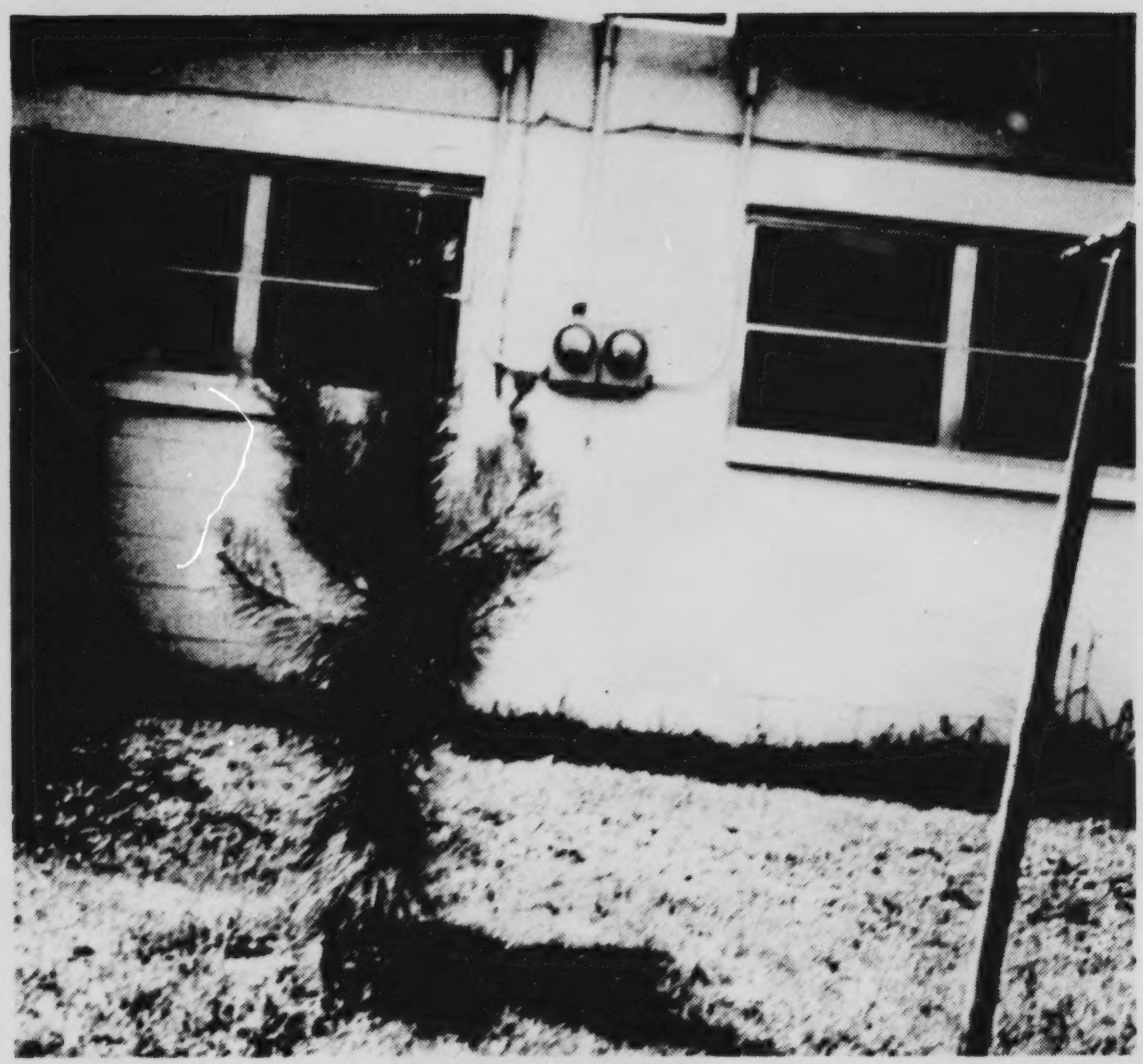
At the same time, the young child often egocentrically assumes that the camera will "see" and record exactly what is experienced. For example, if a child waits all afternoon for his father to return home from work, purposefully pointing the camera in the direction of the door as the father enters, the child not only expects but does frequently consider the resulting image to be an adequate "Picture of My Daddy." At this stage, the child is unable to distinguish between the memory of the photographic experience and what was actually recorded on the photographic film, often clearly expressing surprise if someone insists that what the photographer perceives is not apparent in the resulting photograph.

A principle responsibility of the teacher at this time, therefore, is to provide opportunities for the child to share such photographs. Through sharing, the child enjoys the feelings of importance and recognition which result from the attention of peers, and at the same time, begins to realize that the photographer's intentions are not always evident in the resulting photographs.

Some children, however, remain satisfied as long as they recognize their own photographs. They regard their images as "private property," and whether or not anyone else responds to the image or even recognizes the subject matter is of minimal importance. Ultimately, the child does come to recognize the value of his or her photographs as a means of communicating with others. The time required for him or her to come to realize this exciting possibility, however,

This is my favorite thing in my house.

38



This is my pine tree.
It's very spaisal because
I grew it from a seed in
my Millhaper nursury
Schooll.

This is my dad

is direcly in proportion to the number of opportunities provided for using the camera and then sharing the photographs with an audience, no matter how small. Such sharing can occur in teacher-guided small groups, or informally with family and friends.

At such a time, the child begins responding enthusiastically to suggestions both for photographing and for ways to share the resulting photographs with others, such as on a bulletin board or in a scrapbook ("Our Families," "Our Houses," "Our Pets"); in personal diary-type notebooks ("Things That Make Me Happy"); or as part of some academic skill activity. Such potential uses for the photographic images within the regular school curriculum are dependent merely on an abundant supply of film and paper and the teacher's ability to keep up with the child's growing enthusiasm for photographing!

Eventually, through such activities as described, the child will begin to recognize the need to deal with the camera's limited perspective by exerting more control over the act of photographing. The child begins to want others to be able to see what he or she saw; the child wants to share information about the subject. With this new goal, the child moves to the next stage of photographic image-making.

Do you know my uncle?

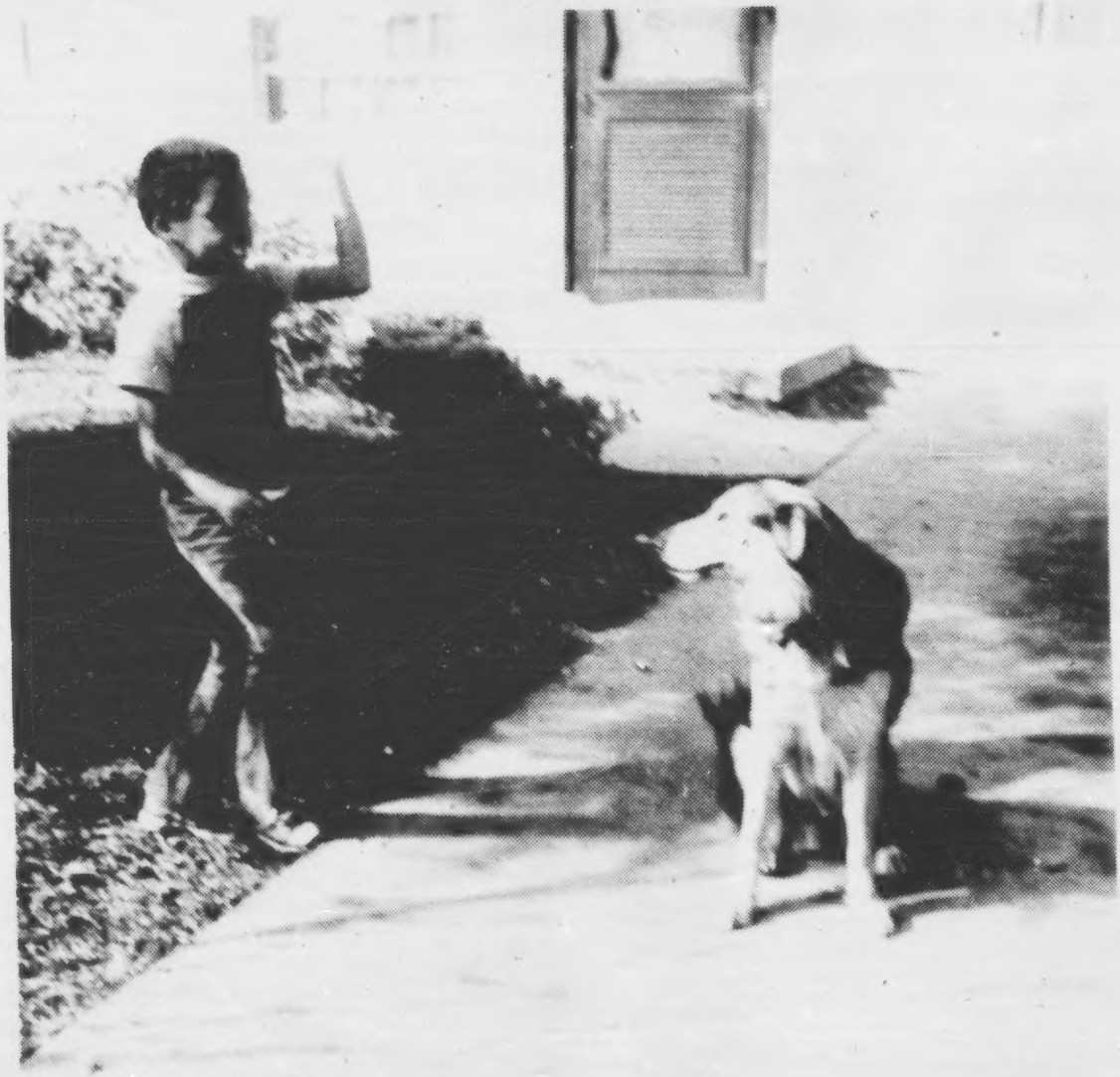
No, it's not a picture of a tree. It's a picture of my brother-- can't you see him up there?

OUR PETS . . .

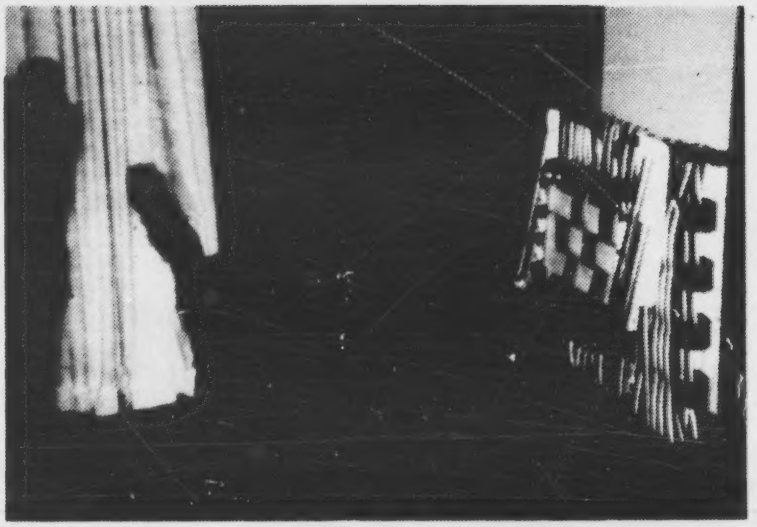
Shanna's dog

OUR PETS . . .

Kevin's dog



OUR PETS . . .



Claire's cat

THINGS THAT MAKE ME HAPPY . . .

Mushrooms

THINGS THAT MAKE ME HAPPY . . .

Clouds

THINGS THAT MAKE ME HAPPY . . .

My church

The Flag

THINGS THAT MAKE ME HAPPY . . .

Flowers

THINGS THAT MAKE ME HAPPY . . .

Friends

What Makes <u>You</u> Happy?

Put your photograph here . . .

Stage III

The child is now involved not only with the camera and the selection of subject matter, but with the coordination of the two. The child has now learned that if personal responses to the world are to be shared, it will be necessary to accommodate the viewer. Understanding now that taking a picture requires more than just pointing the camera in the right direction, the child becomes more selective, more direct, and probably more excited about the potential control over whatever he or she wishes to photograph. The child begins to consider the resulting photograph before taking the picture, making adjustments in the photographic process. The child becomes more aware of what is visible in the viewfinder as separate from what is experienced and tries to imagine what it will look like in the final print. A five-year-old who cannot yet close one eye is still capable of deciding if the information she intends to share will be more apparent if the subject is "up close" or "far back", if she has had enough opportunities to receive feedback from others about her images.

Now the teacher becomes more directly involved (1) by helping the child clarify his or her goals and expectations both before and after going out to photograph, (2) by providing activities designed to increase the skills in using the camera which are necessary to produce the desired results, and (3) by preparing the child's proof sheets and discussing with him or her selections for enlargements.

The child enjoys sharing the images in their miniature form with the teacher, re-experiencing the photographic process through viewing of the images in sequence, and trying to anticipate what others will be able to perceive in each. Such sharing provides an excellent opportunity for the child to describe the entire photographic experience, using the visual sequence as cues for the verbal description. The child may wish to write about the photographs from the proofsheet, or comments may be recorded by the teacher and used later in some combination with enlarged images.

There goes Princess. She's always getting at something.

Should the child decide, whether at the proofsheet stage or with enlarged prints, that any one image is not quite satisfactory, there is an eagerness to meet that communicative challenge that bears no resemblance to the frustration frequently associated with failure in school. The pursuit of excellence is a goal which is often a source

This isn't a very good picture of my daddy because he's too dark and too far away. I think I should take it again.

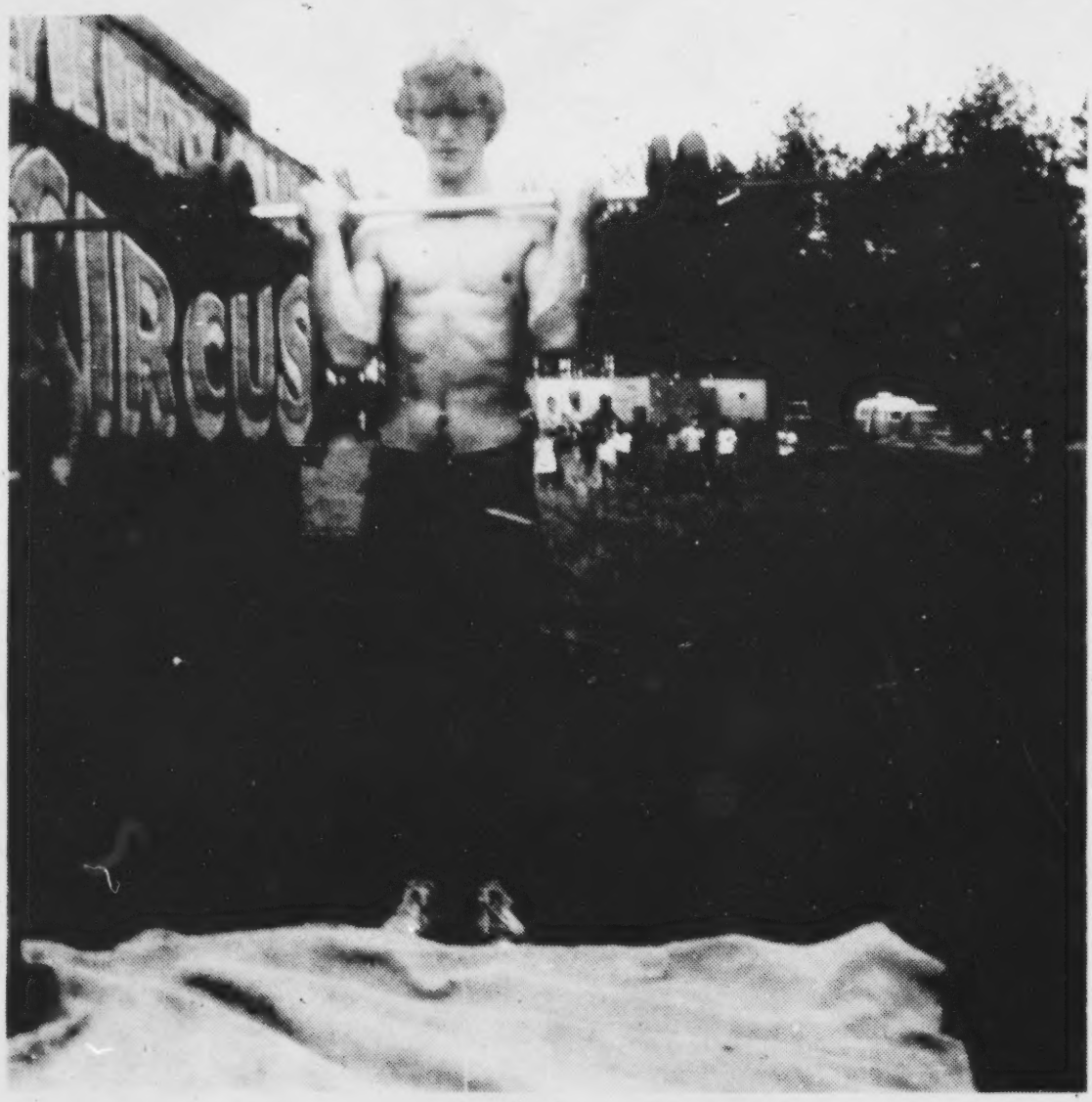
Here's a <u>good</u> picture of my daddy!

of tension between teacher and child, especially when the goals are arbitrary and impersonal. Yet, when the child sets personal standards, and the teacher/peer discussion merely stimulates that self-evaluation, frustration is minimized. Instead, the child is eager to go out with the camera and try again.

As the child's skills and enthusiasm for image-making increase, so will the interest and willingness to participate in more structured activities relating to skills in visual literacy. The child can now be encouraged to attend to elements within the photograph other than the readability of the subject matter. A child at this level will benefit from opportunities to classify, sequence, sort, and arrange photographs according to content (i.e., work/play, large/small) as well as photographic properties (light/dark, candid/posed, close-up versus distant). Eventually, as the child begins to use photographs to convey information, relate an experience, illustrate a story, or to capture the important aspects of an event, the results of such activities can be objectively as well as subjectively evaluated. It is now clear to such photographers that some images "work" better than others.

Well, this was supposed to be a picture of Rachelle, but I now think it's a picture of the creek.

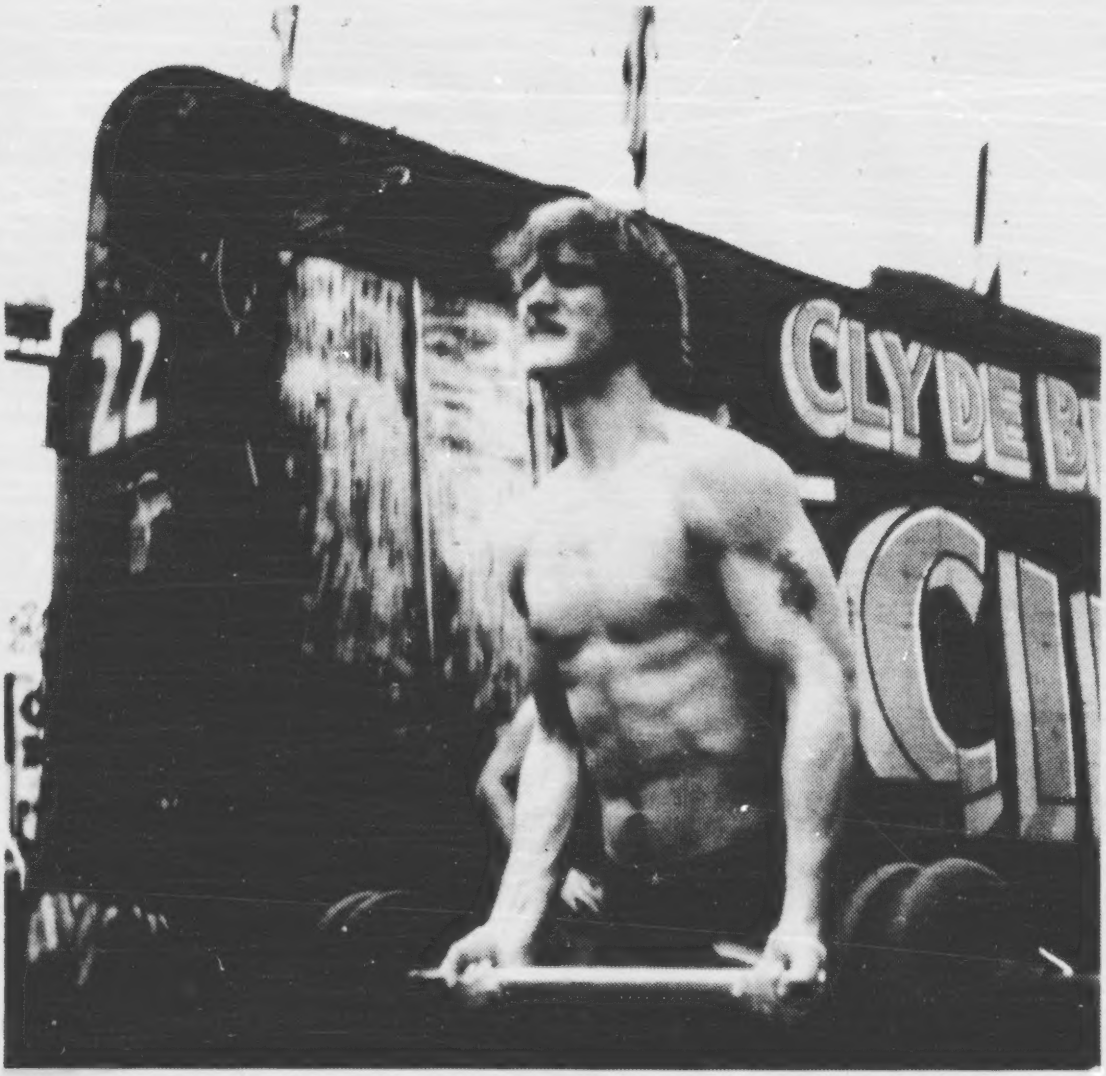
As the children are given opportunities to photograph and re-photograph the same subjects and situations and to share and view photographs with other children, comparisons become inevitable. Not only does the child become aware of differences within his or her own images but also between those of peers. Such comparisons should be encouraged, not necessarily to determine which image is "better," but to note how the images are different, to recognize the variety of responses possible to the same subject, and to appreciate what is special about each photographer's personal response. Discussions, both spontaneous and planned, enable each child to become aware of the differences in images that result from technical skills, photographic properties, and personal preferences.



This picture of the strong man shows him thinking.

At the same time, group criteria may often be used appropriately now to help each child evaluate his or her own work within the context of, for example, a class project. With adult guidance, young children at this stage of image-making can accept and benefit from constructive group criticism, assuming, of course, that each child plays a part in establishing group goals and standards.

Thus, through repeated opportunities to photograph, share, and evaluate images with others, the child begins to make the transition to the next stage of involvement with image-making.



This picture shows him being strong. . . . Let's use this one in our book about the Circus. . . . It's a good thing you took two pictures, Jamie!

Stage IV

Encouraged and stimulated through discussions with teachers and peers to recognize photographic qualities which distinguish one image from another, the child begins to respond to subtleties in certain photographs which make them "special." This higher level of visual discrimination is joined by a more personal involvement with the images as the child realizes that photographs can do more than impartially share information. There is now an appreciation of the potential of the photograph to communicate feelings and ideas of personal significance.

As the child learns to deal with such elements as light, time, and space to achieve the desired results, he or she also learns that the use of such discrimination and control makes it possible to produce images which go beyond the earlier communicative attempts. There is now a strong desire to record not just any response to the environment but a particular response. The child begins to make images which require decisions outside those like *Is there enough light?* and *Can I get closer to him?*

Earlier, in Stage III, the child tried to coordinate the use of the camera with the selection of the subject, and the resulting image was considered satisfactory as long as it was recognizable or "readable." Now, the child's decisions reflect a concern and understanding of the potential of the photograph to communicate a personal response to, as well as information about, the subject.

With this evolving attitude, the child can take a photograph of a friend and get excited because

. . . it was fun to take the picture;

. . . the light was right, the camera was ready, and the resulting image is recognizable; and

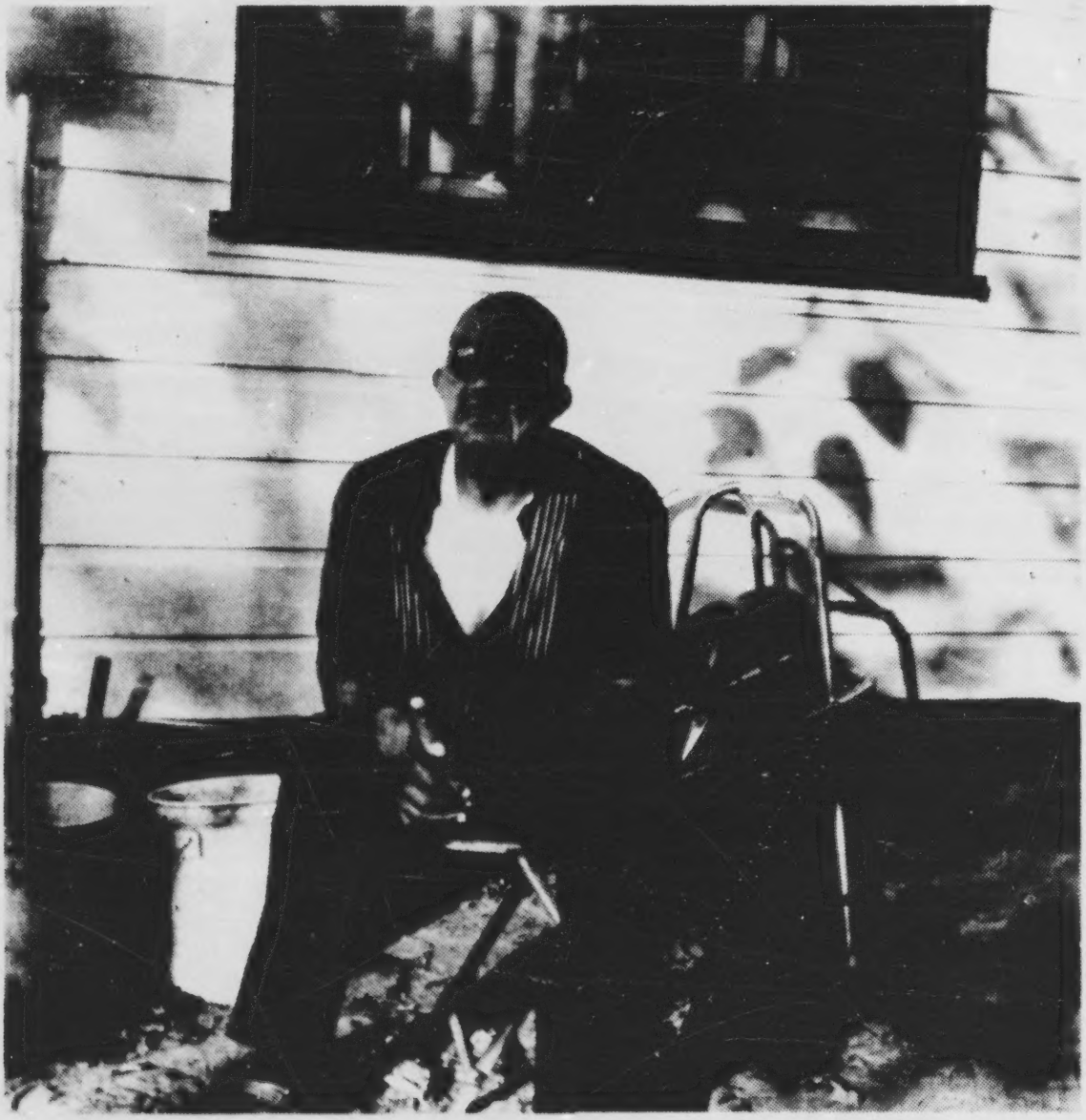
. . . personal feelings and perceptions of the subject are revealed in the resulting photograph.

The child now appreciates the difference between making an image <u>of</u> something and making an image <u>about</u> something.

The changes described in this fourth stage, however, may or may not be readily apparent in the photographs of young children. The major change has been in the mind of the young photographer and is first revealed in his or her attitude towards making the photograph rather than in any immediate improvement in the photographic quality of his or her images. The child's technical skills will continue to improve with experience and instruction. The appreciation of the communicative power of the photograph, nurtured by peer and teacher interactions, will also continue to grow. The child's goals now are to make the most of his or her visual and technical skills in order that personally significant images might be meaningfully shared with others.

I love this picture of Dea. She's being silly with Howard just like she always is!

In the child's development as a "creator of visuals," there has been a progression from a stage characterized by a fascination with picture-taking, with no desire to communicate with images, to a stage which includes that same enthusiasm and eagerness to use the camera, but with the additional goal of self-expression through image-making.



I took this picture of my granddaddy so you would know him. This is where he sits every day . . . when I come home from school I see him. I love my Granddaddy.

Marshall and Larry love to play here. They look like they're friends with that tree, don't they!

As in any phase of development, no two children will go through these stages in exactly the same way or at exactly the same time. Neither will any two children necessarily benefit in the same way from a single photographic activity. Some children may progress to the third or fourth stage of involvement with image-making concurrent with their third or fourth opportunity to use the camera. Other children may remain involved with the fun of using the camera without discriminating among their images for some time.

A teacher does not need to feel that each child should reach any particular stage of involvement at exactly the same rate. Neither will any two children reach any particular stage by the end of the school session. The goal is to help each child make the most of the photographic experiences at whatever stage he or she happens to be, rather than pushing arbitrarily toward the next stage.

These stages are a reflection of each individual's personal involvement with image-making. Not only are differences inevitable, but they are what make photographic activities so exciting in a classroom. For a child to find acceptance for his or her uniqueness while learning that there is more than one way to photograph the playground is a valuable educational objective in and of itself. What is more, the feelings of success that are stimulated within each child, at whatever stage he or she may be, are enough to warrant the inclusion of photographic activities into the curriculum.

CHAPTER III

PHOTOGRAPHY IN AN EARLY CHILDHOOD CURRICULUM

Photography is an obviously appropriate means for developing and enhancing a child's visual skills. It also has value as a practical and exciting tool to use as an integral component of the overall early childhood curriculum.

An effective early childhood curriculum is based on an understanding of the multiplicity of abilities, interests, and needs of children in a primary classroom. It strives to provide many and varied opportunities for the development of each child's physical, mental, social, and emotional being. At the same time, the quality of a child's life from day to day is of primary concern. Thus, the curriculum is neither entirely achievement-oriented nor overly focused on acquisition of new skills or getting the five-year-old "ready" for first grade. Rather, the variety of personal interests and learning styles which are present among the class members are the controlling factors in the planning process. As a result, the people, the materials, the environment, and the plans which make up the school day are sufficiently flexible and personalized to respond to the unique characteristics of the class as a group as well as to those of individuals. (See Appendixes B and C.)

Because the photographic experience is uniquely personal to every individual, the integration of photography into the curriculum enhances the young child's egocentric development, thus assuring each individually that the world of the school does, indeed, revolve around him or her.

Those reading the examples of the treatment, discussed in this chapter, will quickly realize that the intention is not to provide a curriculum guide, step-by-step directions, or any specific sequence of activities to be followed in order to achieve positive outcomes with any group of young children who become involved with photographic image making. Rather, the purpose of this monograph is to share an attitude which, it is hoped, will encourage the reader to explore the unlimited possibilities for using this contemporary tool--a camera--in the classroom. This is not a recipe. It is an invitation!

The examples included of photography by children are presented as an illustrative rather than as an exhaustive description of the treatment. They serve as well to demonstrate the potential relationship between photography and the traditional goals of early childhood education. Academic skills such as reading, writing, problem-solving, and self-expression may be practiced and enhanced as a result of a child's photographic activities. Inter- and intra-personal skills and understanding are constantly nurtured as a child explores self, others, and

the environment with the camera. Classroom projects, field trips, and teaching units take on a new significance to the children as they personalize their experiences and interests through photography.

Using Photographs As Teaching Aids

Children's photographs have innumerable uses in the classroom, either as individualized teaching games or for class use in a learning center.

Can you take a picture of something which begins with TR?

TRUCK

62

TREE TRUNK

TRICK

Circles and Squares, Straight Lines and Curved Lines . . .

What Shapes Do <u>You</u> See?

What Shapes Do <u>You</u> See?

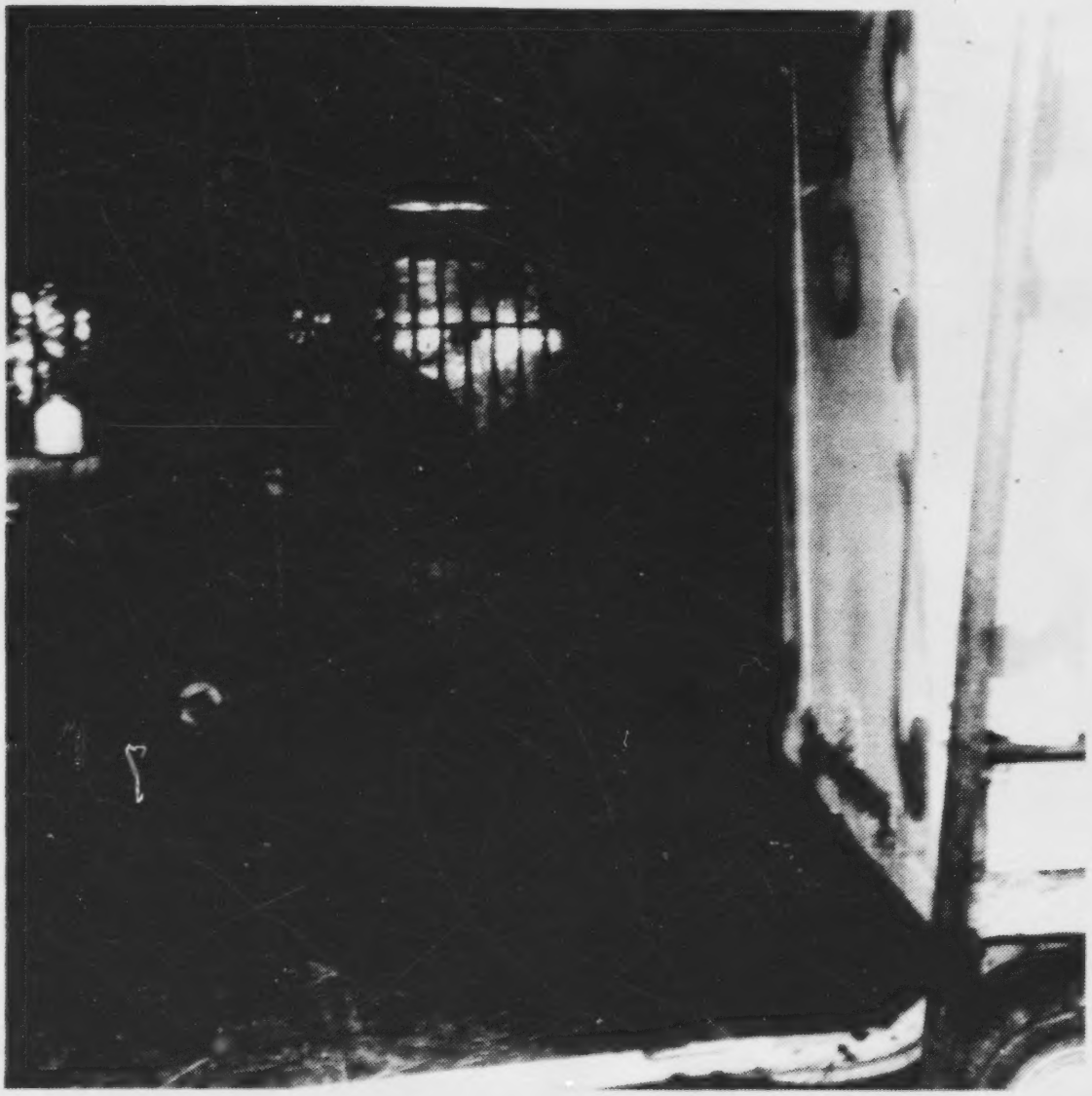
A language experience chart acquires more personal significance accompanied by a group of photographs. Words written under a picture provide a new sense of validity when dictated by children as they talk about their photographs.

We went to Morningside Park.
We walked on a trail through the woods.
We saw a hog-nose snake.
His name was Oscar.
Everybody got to touch him.
Some of us were afraid!

A camera can be invaluable on a field trip. Not only can the resulting photographs stimulate a class discussion about the experience, but they can also be used to help share the experience with those who were not able to go along. A scrapbook of field trip memories will be appreciated long after the actual event is over.

WE WENT TO THE CIRCUS!

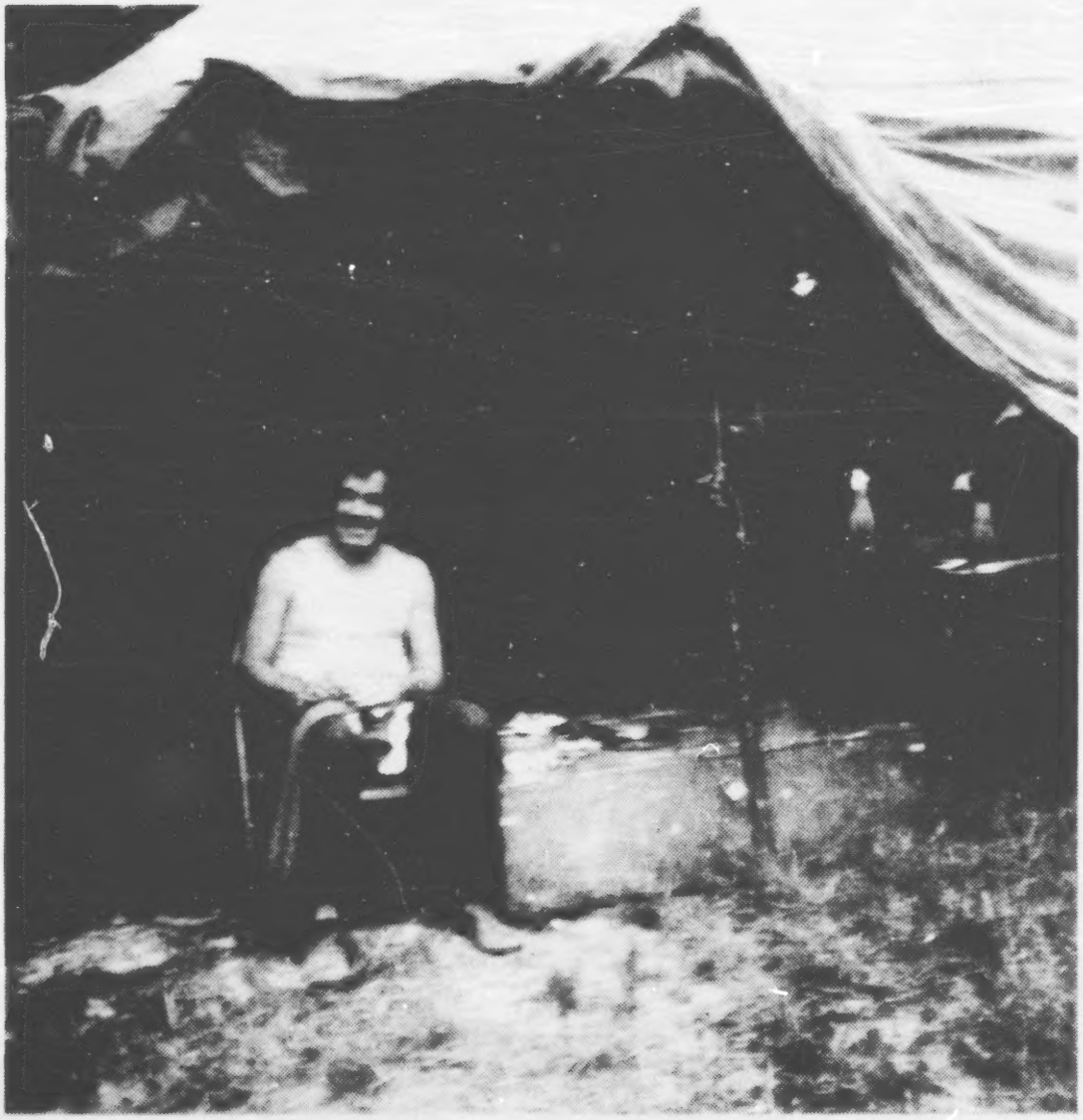
We saw lions in their cages. . .



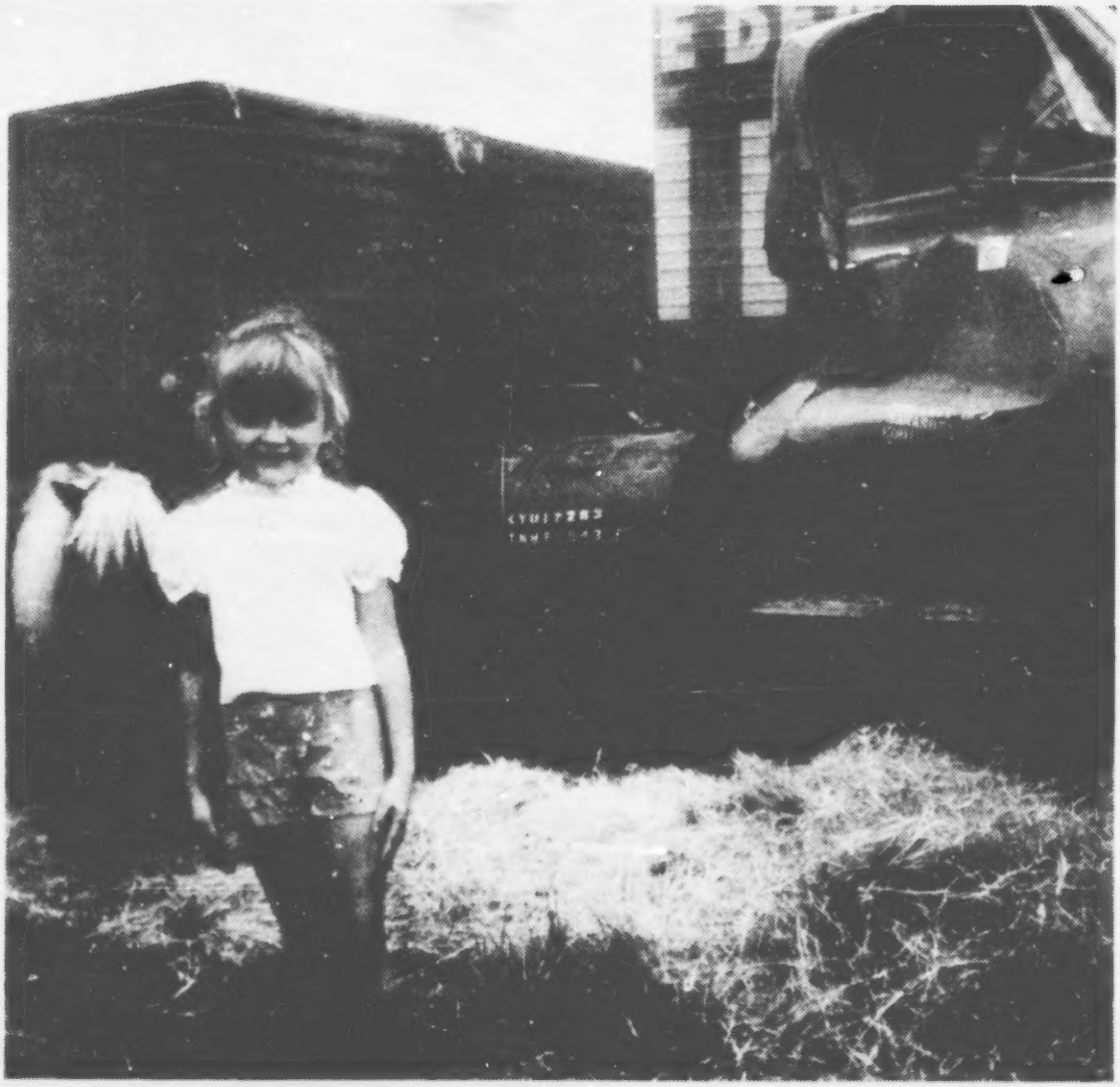
and a man with a tattoo!

68

This man's house is his tent.



Nellie lives with the circus.
She is 6 years old.
She is a bare-back rider.
She has a <u>beautiful</u> costume.



Using Photographs With Special Units

Most classroom projects and special group interests, such as Our Families: Mothers, Fathers, Sisters, Brothers, may be supplemented and enhanced by the addition of photographic activities.

OUR FAMILIES . . .

What's special about <u>your</u> family?

M O T H E R

OUR FAMILIES . . .

What's special about <u>your</u> family?

FATHER

SISTER

OUR FAMILIES . . .

MOTHER

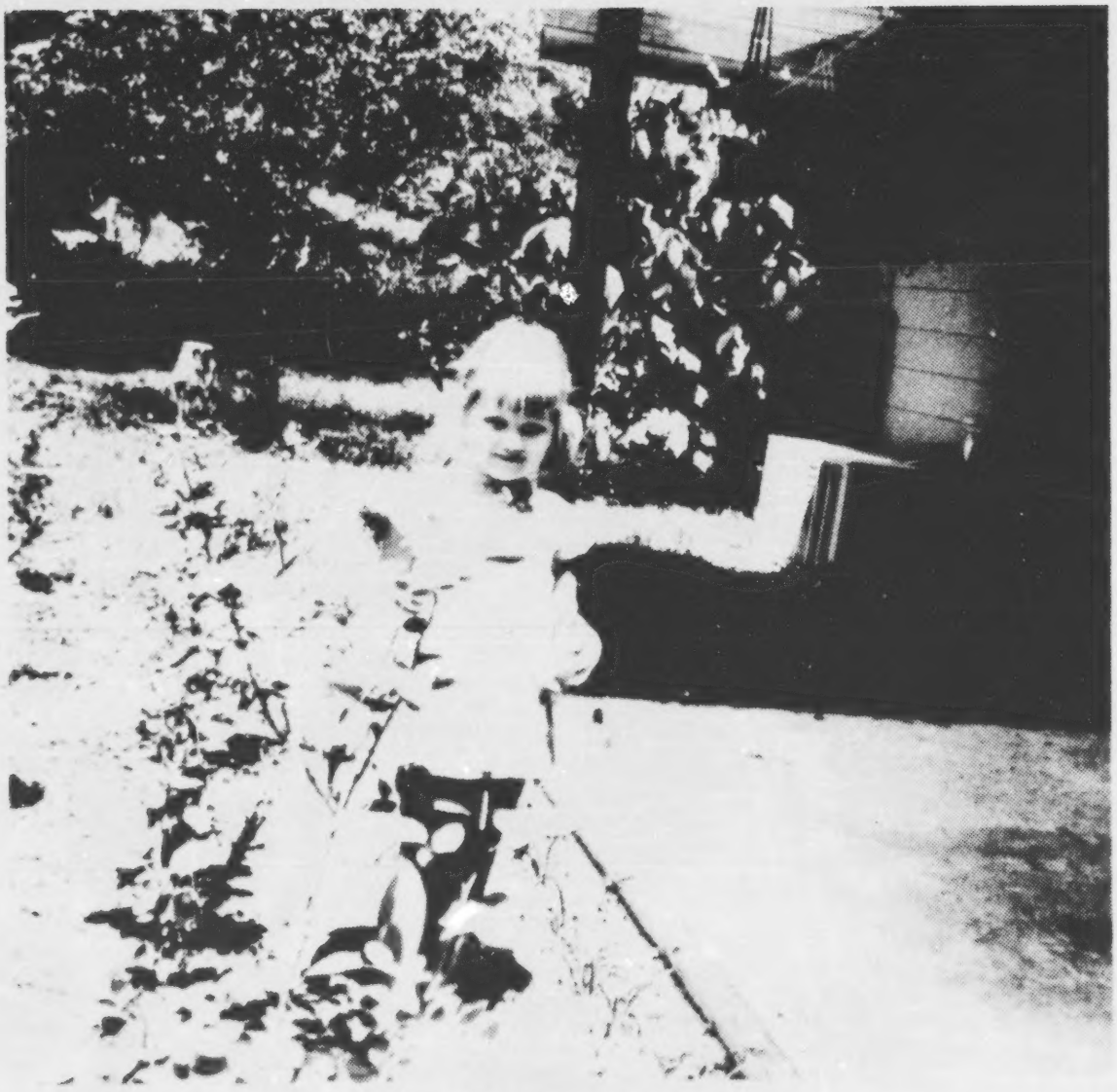
OUR FAMILIES . . .

What's special about <u>your</u> family?

MOTHER

OUR FAMILIES . . .

SISTER



This is Katy, she's my little sister and I Love, Love, Love Katy Michell Towner!!

OUR FAMILIES . . .

What's special about <u>your</u> family?

MOTHER

OUR FAMILIES . . .

FATHER

OUR FAMILIES . . .

What's special about <u>your</u> family?

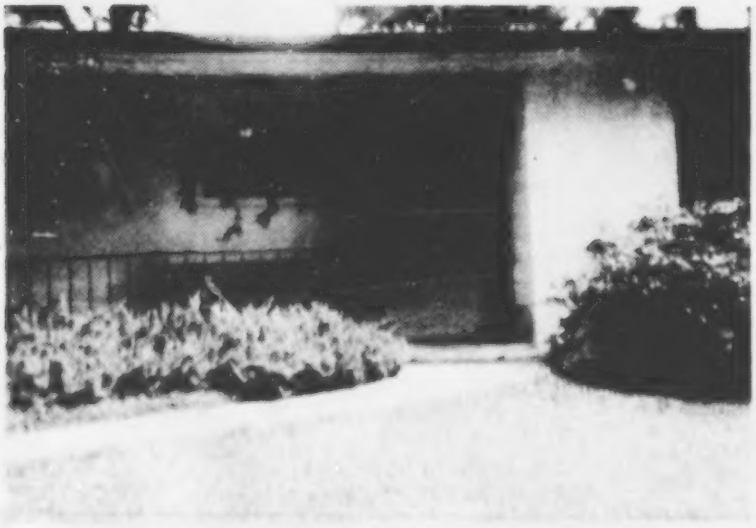
MOTHER

OUR FAMILIES . . .

MOTHER and BROTHER

Motivating Writing

Children are not only willing, but often eager to try to write about their own photographs. Difficulties with spelling or even holding the pencil correctly do not need to deter children from proudly labeling and captioning their images.



This is a
pihtfo
my Hows

the Creek

My Indian doll.

I Was Siting
IN The
School
WhaN I All of
a Sadn my
Mom Saw Me

I Like My
fomilYS CAr

84

Writing Letters

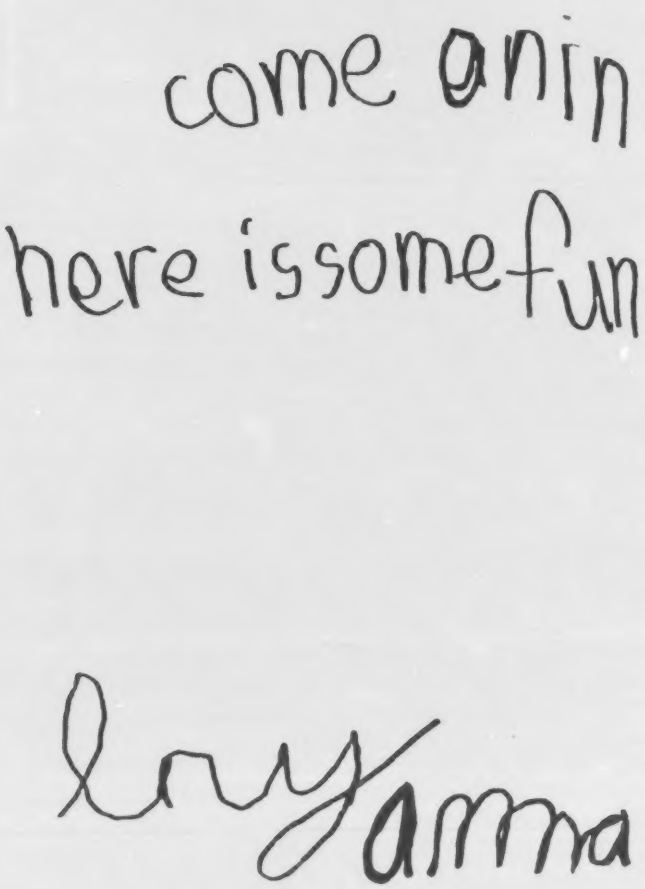
Making photo post-cards is an excellent incentive for letter writing. This card, for example, was used to send to a child who had been absent for several days. The message, though unwritten, is clear--*We Miss You! We're sorry you're sick.*

Photo Books

A photo book is an exciting as well as a practical product of a child's picture-taking sessions with the camera; hence, photo books are assigned high priority. Some books are like picture dictionaries, with a simple label under each picture. Some tell stories, with all words dictated by the child or children who take the photographs; others

are informative, following some type of assignment. (See Appendix D.) Many are just collections of photographs taken by an individual child with his or her responses written underneath each image.

Anna's Photo Book



ahh— I Give me a
BIG SMILE.

oh-oh, here's sister
Funny Face again!

80

Here comes Miss picture taker.

That's me taking
a picture of me! Tee Hee

Some children are able to write their own captions; some dictated the captions to an adult. Regardless of the type of book, length of caption or story, or reading level of each child, these books became a special, valuable part of the class library.

My Family is My People
Me is one of Them

My Family does hard Work

I liket. Go out
to eat With
My family

I Like to
PIAY With
MY family

Children who have previously shown no interest in books are found pouring over the photographic books, especially if it contains their pictures. Children who are reading below grade level and uncertain about their ability to read and, therefore, avoiding confrontations with books begin to ask to make more books. Boys in particular, who previously have shown no interest in reading skills, begin to initiate their own reading activities, often asking for help in learning the words in their photo books.

Although there is no way to determine how much of each child's reading improvement was the result of the photo books, there was an obvious relationship on the part of several previously hesitant children with their new desire to learn to read and the appearance of these special books.

Promoting Oral Expression

If a child is given frequent opportunities to share his or her photographs, the willingness to talk before a group often increases dramatically. A child, who rarely spoke to anyone at the beginning of the school year, verbalized as she viewed the results from one of her first photo experiences.

My pictures tell me that I took a picture of it . . . and I took a picture of my dog . . . I took a picture of some other people houses cause they live cross the street . . . I took a picture of my friend house and I took my next door friend . . . My picture has my house on it by my bask fence. My house has stayed there for a million years before I was born and my picture tell when I was born . . . When Christmas came I got a bicycle but my mother she had to put it out on the porch . . . she could never let it stay in like my brother bike.

As the child engages in such egocentric thinking, a personal vocabulary may be recorded and used later when the child becomes interested in trying to read captions of the photographs.

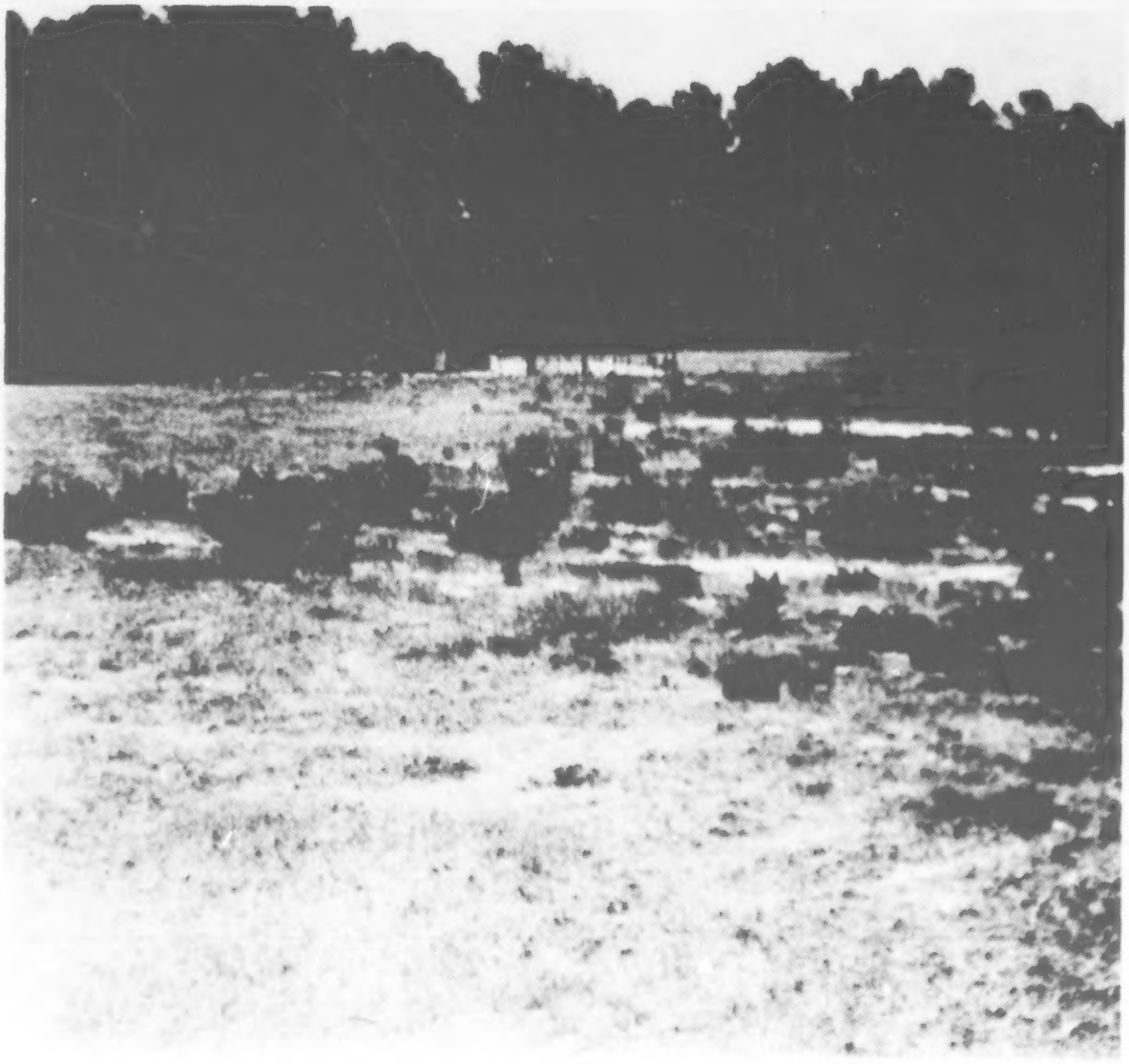
As the children become accustomed to the teacher's questions--like *What does the picture tell you? How do you feel about it?*-- about their photographs, it is only logical to ask those same questions about their efforts with other visual media. Hence, children's drawings, paintings, sculptures, and creative dramatics all may serve continually to encourage self-expression. Emphasis, however, is continually on helping each child find ways to use these media to tell someone else something, using both visual and oral stimuli.

Increasing Environmental Awareness

A child's photographs often reveal evidence of environmental awareness and offer feedback that is a source of inspiration as well as information.

I took this picture because it's scenery.
I liked the way it looked.

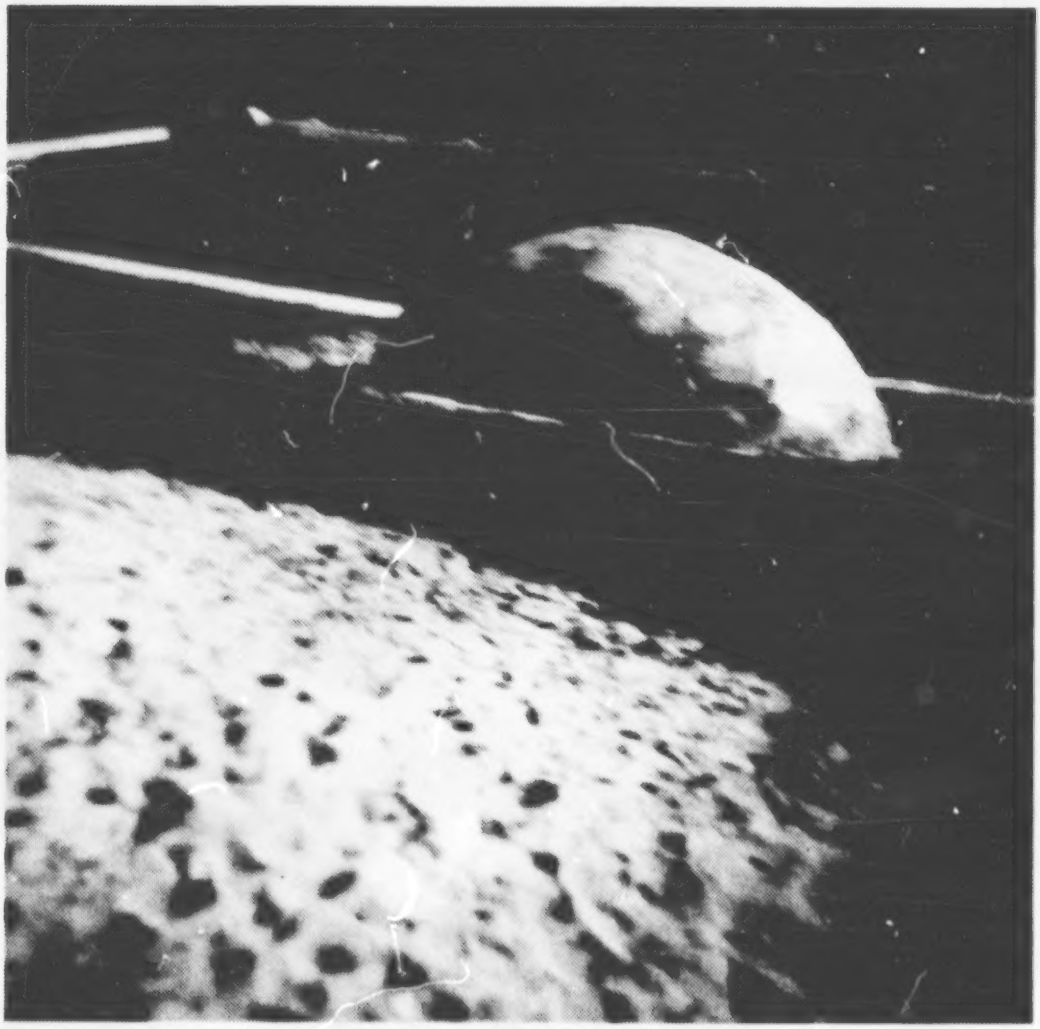
And the next day . . .



I like this place. I like that old barn there. I saw this when I came out of the doctor's office.

Stimulating Creativity

Photographs also reflect and encourage a child's creative response to the environment.



This picture is funny because it looks like outer space, but it really isn't.

I came up close to him, and then I saw his shirt in the camera. It didn't even look like a shirt, so I took a picture of it. I like it.

Valuing Uniqueness of Perception

The display of each child's photographs plays an important role in establishing the validity and acceptance of each child's interpretation of the environment. As the photographs become an integral part of the classroom scene, whether on a bulletin board or in a scrapbook, each child becomes more enthusiastic and confident of the ability to share personal perceptions with the class. When two or more children photograph within the same environmental space, their differing points of view are often reflected in the photographs. Capitalizing on the differences in perceptions, the uniqueness of each photographer's response can be emphasized.

When You Look Out At The Playground, What Do You See?

Tommy sees shapes and shadows.

Ashley sees friends playing.

100

Howard sees a tree.

101

Fostering Responsibility

Not only are the children consistently eager to use the camera, but they are also consistently responsible in their use of it. From the beginning of each child's involvement with photography, an understanding is reached between teacher and child that only those individuals who act responsibly while using the camera will be allowed to have one for independent photographing. The use of the camera is regarded as serious business and only available for those who are capable of handling such a responsibility.

During the course of this study each child proved himself capable. At no time during any photo experience was it ever necessary to take a camera from a child as a result of his or her irresponsible or careless actions. In fact, the freedom to use the camera seemed to exert a positive influence. On those occasions (such as field trips) when it appeared that one child might have difficulty in behaving appropriately, he or she might be offered the opportunity to be "trip photographer". Stimulated by feelings of pride and self worth, when assigned the responsibility for recording particular experiences or events, his or her behavior would, more often than not, be exemplary.

Responding to Individual Needs and Interests

In implementing an early childhood curriculum which includes the integration of photography, the teacher attends to differences as well as similarities of children. Not only does he or she become aware of these children as individuals, but he or she knows what to do with the information once each child's particular abilities, interests, and needs are revealed. Along with an awareness of the various stages of development that each child is going to go through, the teacher also learns to recognize when the child indicates a state of readiness for the next step.

All of my pictures are shells. I like shells. I didn't take any pictures of people yet. I might tomorrow.

A perceptive conscientious teacher evaluates many different areas of learning just through close observation of the child. By observing the child while he photographs, the teacher gains access to much valuable diagnostic information which can be used in planning appropriate growth-producing activities for the child. This information relates to much more than just to the child's photographic skills or level of involvement with photography.

Through the process of taking a photograph, the child demonstrates physical coordination (or lack of it). In his approach to the subject, the child gives clues to his self-confidence and his ability to deal with others. He also gives evidence of his ability to follow directions, to concentrate, and to accept responsibilities. When he photographs with a group of children, an observant teacher notices how that child cooperates, shares, takes turns, and appreciates the ideas and feelings of his peers. With such a wealth of information about each of the children, the teacher personalizes prescriptions, including praising, making suggestions, giving directions, or just staying out of the way.

Here's Nancy reading.
I wish I could read.

My mother took this picture. I told her to. I'm playing like I'm strong as my brother.

One child, invariably reluctant to modify her plans or activities in order to accommodate herself to the wishes of others, was asked by the teacher to join a friend and share her photographs. Her (taped) response was:

> *Ahh, do I have to? Oh, gee, this is tired. I'm so tired. Well, I'm so tired. . . .*

Then, beginning to share her photographs . . .

> *Well, this is really pretty, and I like it. Well, the door is red but it doesn't seem so red, but it is red! And that window, you can see out of it and it's so pretty cause my daddy cleaned them and the bushes are pretty cause I like them . . .*

and continuing to reflect on the rest of her photographs . . .

> *Well, this picture, I did take this picture! Well, this picture I like because the trees are so pretty and that one, I like it so much, and that one, too, is real pretty and that one, I love it!*

When asked if she would like to put the pictures together and make a book of "Pretty things that I like," not only did she readily agree, but she asked if she could take additional photographs for the book.

In addition to helping a child gain confidence in the value of his or her personal responses, the teacher must provide an environment that is not only conducive to growth, but that also enables a five-year-old to enjoy the experiences particular to his or her age or developmental level without undue preoccupation with what he or she will or will not be able to do when he or she is six. In other words, if the expectations of the teacher are coordinated with the present abilities of each child, then the teacher will not only "take each child where he is and take him as far as he can go," but will also help him feel successful where he or she is now, while remaining cognizant of the potential for growth and the subsequent implications for instruction.

Supporting The Developing Self-Concept

While most young children have positive feelings about themselves and assume that those things which are important to them will be important to others, they are not always sure how to share such feelings. Photography provides opportunities for such self-expression. The acceptance of the expression seems to enhance those positive feelings.

This is a design I made in the dirt. I like the things I make.

My brother likes me. See how he's smiling at me.

This is a picture of me because I like myself!

As children photograph things which are important to them, whether the purpose is to share with others on the bulletin board or just as a spontaneous inclination, they are in an exciting position to discover more about themselves.

Everytime I go outside with the camera I take a picture of the creek. I must like the creek a lot.

This is my plant.
I water it every day.
I like to help make things grow.

111

I didn't know
I had so many friends!

112

My next door friends.

In every classroom, however, are individuals who, because of some feelings of inadequacy, have an extraordinary need to "please the teacher." This need is revealed during photographing activities by a child's seeking to be told exactly what to do, hesitating to go it on his or her own with the camera and expecting to be shown the difference between "right" and "wrong" ways of photographing. Lacking confidence in his or her own ability, this child will watch others rather than participate themselves. When the insecure child does photograph, he or she is inclined to copy the type or style for which others have received attention and praise. Thus, instead of personally significant images this child produces a stereotype, based on what he or she perceives as the "preferred image," whether these are out-of-focus action shots, or sharp subject-in-the-focus action shots, or sharp subject-in-the-center photographs.

Photography is an especially helpful tool for the teacher to use in helping such children begin building more adequate feelings of self-worth. The teacher begins by responding to the photographs initially in much the same way he or she might respond to other art activities, that is, by centering discussion around the child's experience or response to a situation rather than focusing on the image, the drawing, the painting. Thus, the child is stimulated to engage in egocentric thought, expressing his or her own needs or priorities. Gradually, then, he or she will come to discover the worth of his or her own creations, contributions, and points-of-view.

Possibly the most significant discovery the child makes in using a camera is the "control" he has over what he or she wants others to see. It is impossible to assess the total effect this feeling of "control" has on each child, but frequently and consistently, situations occur which indicate strong boosts in self-concept as well as improved confidence within a group because of increased group interest, support, and approval.

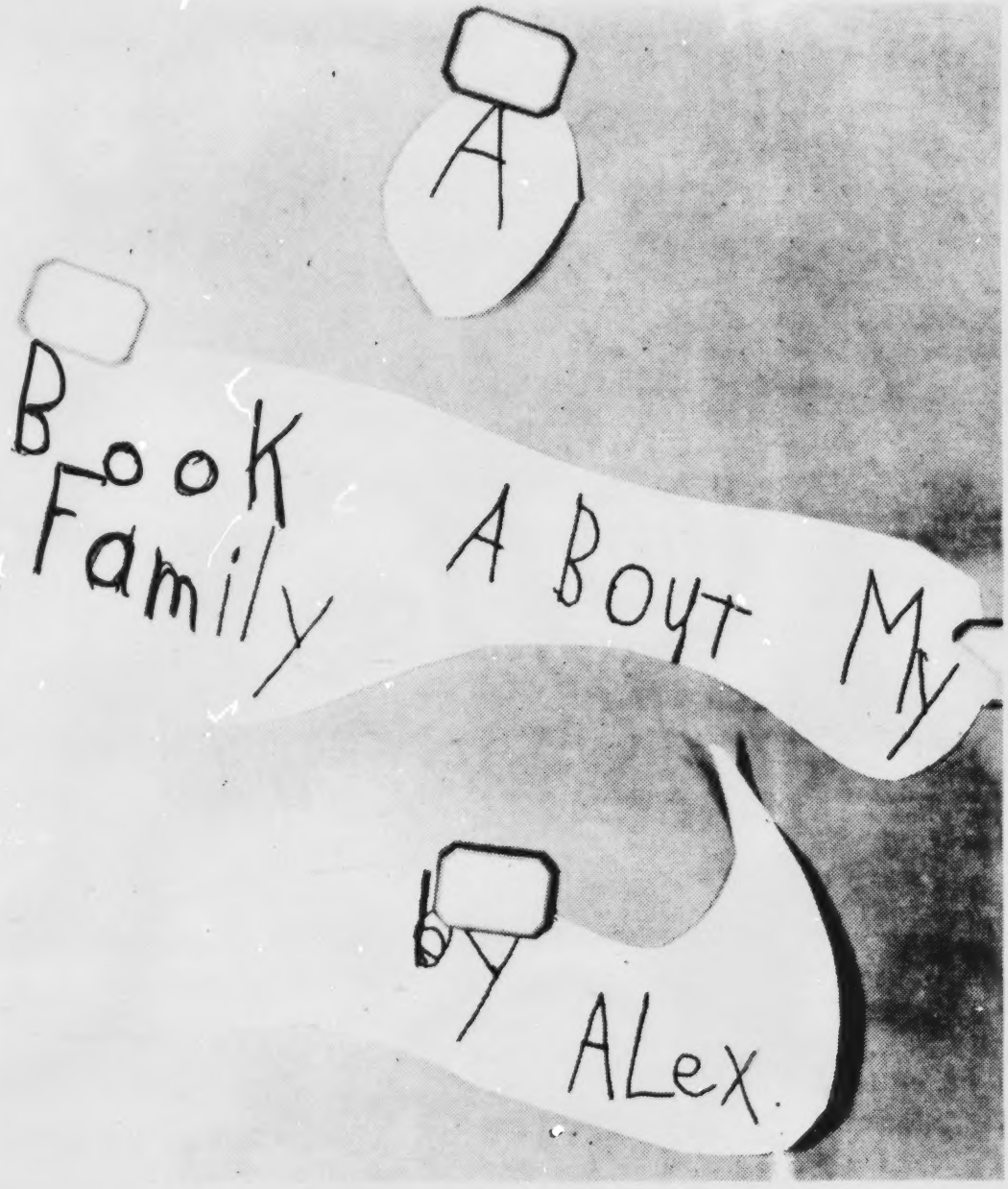
To take full advantage of the potential support to the developing self-concept, the teacher must arrange to see that film is developed as fast as it is received, thus maintaining continuity between the child photographer's thought and action. If the photographs are not printed and shown to the child as soon as possible, the child shows little or no response. He or she seems either uninterested or actually unable to recall feelings or reasons for taking the picture. However, with the time factor solved it is not necessary to bring back enlarged prints. Showing the proof sheet, a single sheet of paper with positive images from the strip of negatives (see Appendix E), is sufficient to allow the child not only to see the images, but select, arrange, and organize those he or she wants enlarged in order to share them.

Thus the child finds it necessary to discriminate between the successful and unsuccessful shots, according to his or her own standards, of course. This technique helps a child grasp the concept of sequencing and increase skills in organizing images. Immediately the child can see the order in which he or she took the pictures. Also, duplicate images are obvious; hence, he or she can eliminate one or the other. By studying the proofsheet in its entirety, the child becomes aware of his or her approach to the subject, compares the photographs with one another,

analyzes the different approaches, and decides which ones are more successful. By following each shooting session with this analysis procedure, children become increasingly conscious of their own feelings of control along with performance as photographers.

Last But Not Least . . .

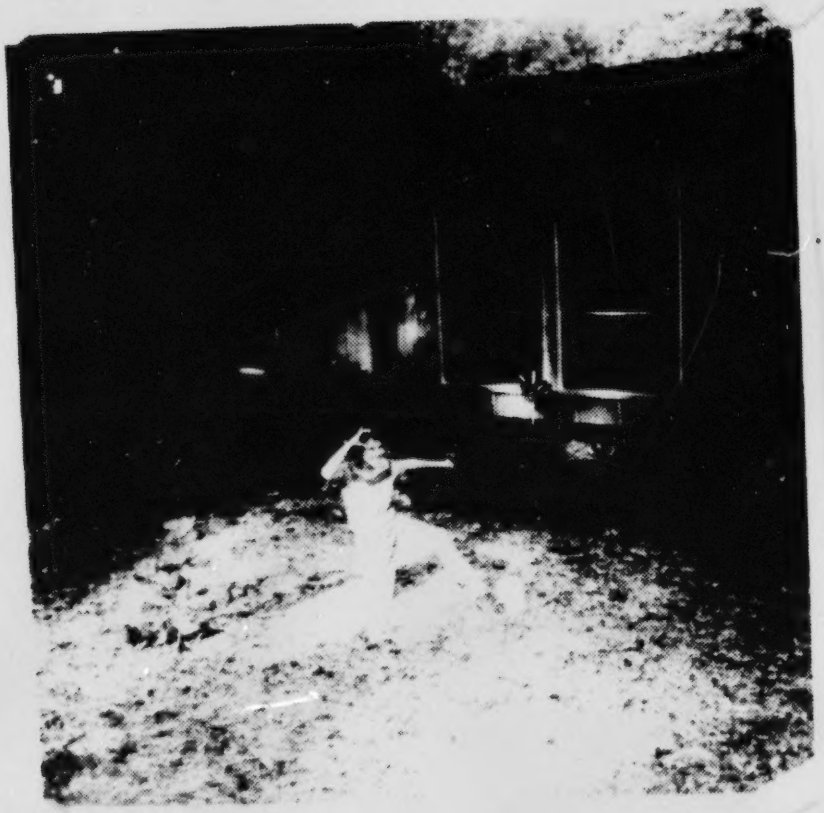
Photography offers the young child an acceptable means of expressing his or her own importance in the world.



This is my mom
She Buys us toy
Because we Share
Them With her
For he PLAYS.

This is My DaD
he is very nice
to me Becuase
We are nice to
him.

This is my Sister
She likes to Figte
together Because
I always com
in her roome
When She don't Wont
me too



At last But not
least This is
My Self I'm
glad alive Because
if I Wasn't
This Book [redacted] Wouldn't
[redacted] Be here.

CHAPTER IV

INFORMED PARENTS

It is particularly important that parents be made aware of the goals and objectives of a planned program in visual literacy because of the nature of the activities and equipment involved. It will be difficult for helpful, supportive parents to keep the proper physical and psychological distance as they watch their five- or six-year-old fumble with an instamatic camera and a flash bulb. They have to avoid being "too helpful." A six-year-old asked to take a camera home to photograph her brother's birthday party. She returned to school the following day with the roll of exposed film and the explanation that her mother took the pictures "because she said I wasn't tall enough to see everything."

Some parents will hesitate to accept the responsibility of having a school camera in their home, especially if they lack confidence in their child's ability to care for it properly. The first time a camera was sent home with one particularly mischievous five-year-old boy, the mother came rushing back to school saying, "Ralph stole this camera from you!" When the mother was assured that the camera was loaned to Ralph to use during a projected family trip, the mother exclaimed, "Why, that's ridiculous! He can't do that. He'll have it broken for sure, and then I'll be having to pay for it!"

This conversation, by the way, took place in Ralph's presence. He was not even sure if he wanted to take the camera home after that, but with much reassurance to both Ralph and his mother about his capabilities, they left with the camera.

Both of these parent interventions could have been avioded if the parents had been informed about (1) the overall goals of the program in visual literacy; (2) the specific objectives of the activity; (3) their child's ability to use the equipment; and (4) the importance of allowing the child the freedom to photograph according to his own impressions. An excellent time to discuss with parents any anticipated changes in precedures is during beginning-of-the-year Open House. Letters describing activities and goals and personal contacts need to be frequent.

A parent who understands the goals of visual literacy is a tremendous asset, particularly to a program such as this. Ralph's mother became an enthusiastic convert after that family's weekend trip. She sent a note to school the following Monday with four extra rolls of film accompanying the one sent home. Her comments were: "We had a wonderful trip, thanks to you and that camera!

I was really proud of Ralph. He was so good the whole time while he was taking pictures that his father decided it was worth it to buy more film for him! We'll be happy to pay for the processing if the extra rolls are too much. Thanks so much for sending the camera home. It was a trip-saver. P.S.--Guess what Ralph is getting for his birthday!"

Not only did Ralph get a camera for his birthday, but he also acquired a bit more self-respect and a more positive relationship with his parents.

As parents become sensitive to the types of experiences the teacher wants to provide for their children, they will begin to make suggestions of possible field trips and interesting environments in which to photograph. Parents who are able to come to school during the day will enjoy talking with children about their photographs and writing down their comments. They will help by taking small groups out of the classroom on "mini-field trips" around the playground and campus with cameras in hand. They will work with children individually and in small groups on visual skill development activities; many parents enjoy helping make photographic puzzles and games either at home or at school. In other words, if they understand the goals, and as they see evidence of their child's intense involvement in the activities, many parents will join the team.

CHAPTER V

ACQUIRING MATERIALS AND MEETING TECHNICAL NEEDS

The expense and time involved in the acquisition of cameras and film and in processing are dealt with in a variety of ways. Cameras must be of durable quality, simple to operate, and of reasonable cost. Such are obtainable by one or a combination of several methods.

First, after explaining the goals of the photography program, ask parents and friends for the extended loan of any instamatic cameras which they are no longer using. Also explain your objectives for the coming school year to local camera and film dealers and ask them for (1) donation of a camera or two, (2) purchase with school discount, (3) purchase of a discontinued style at dealer's cost. By comparing prices and willingness to adjust costs to meet a low school budget in exchange for a year's patronage in the purchase of film and other photographic materials, it should be possible to purchase several cameras of adequate quality for classroom use. Mention the possibility of future parent patronage as well, because it is highly probable that many children will become so involved in taking pictures that their parents will want to purchase a camera at Christmas time or for birthdays.

In addition to instamatic cameras, plastic cameras in the $1 to $2 range usually found in toy stores can be adequate, depending on the goals of the program. These usually require 120 film, rather than the cartridge film, and are somewhat more difficult to load. In fact, an adult would probably have to load the camera for most young children, although upper elementary children can be taught to load without assistance. The probability of light leaks and poorer quality photographs should be taken into consideration. Regardless of which type camera is used, children are highly motivated to learn how to handle and use the cameras correctly and usually deal resourcefully with problems such as light leaks or backs which fall off of the cameras, especially if a roll of masking tape is available.

County A. V. Centers frequently have cameras available to loan to schools or individual teachers. They also frequently have access to supply houses where materials may be purchased at less than retail price.

As for the purchase of film and developing chemicals and paper, these will all cost money. Depending on the availability of materials through the school's or county's A.V. center, a teacher may need again to check with the local photographic supplies dealers and "bargain" for low prices. Occasionally, out-dated film and paper are available at a discount. ASK!

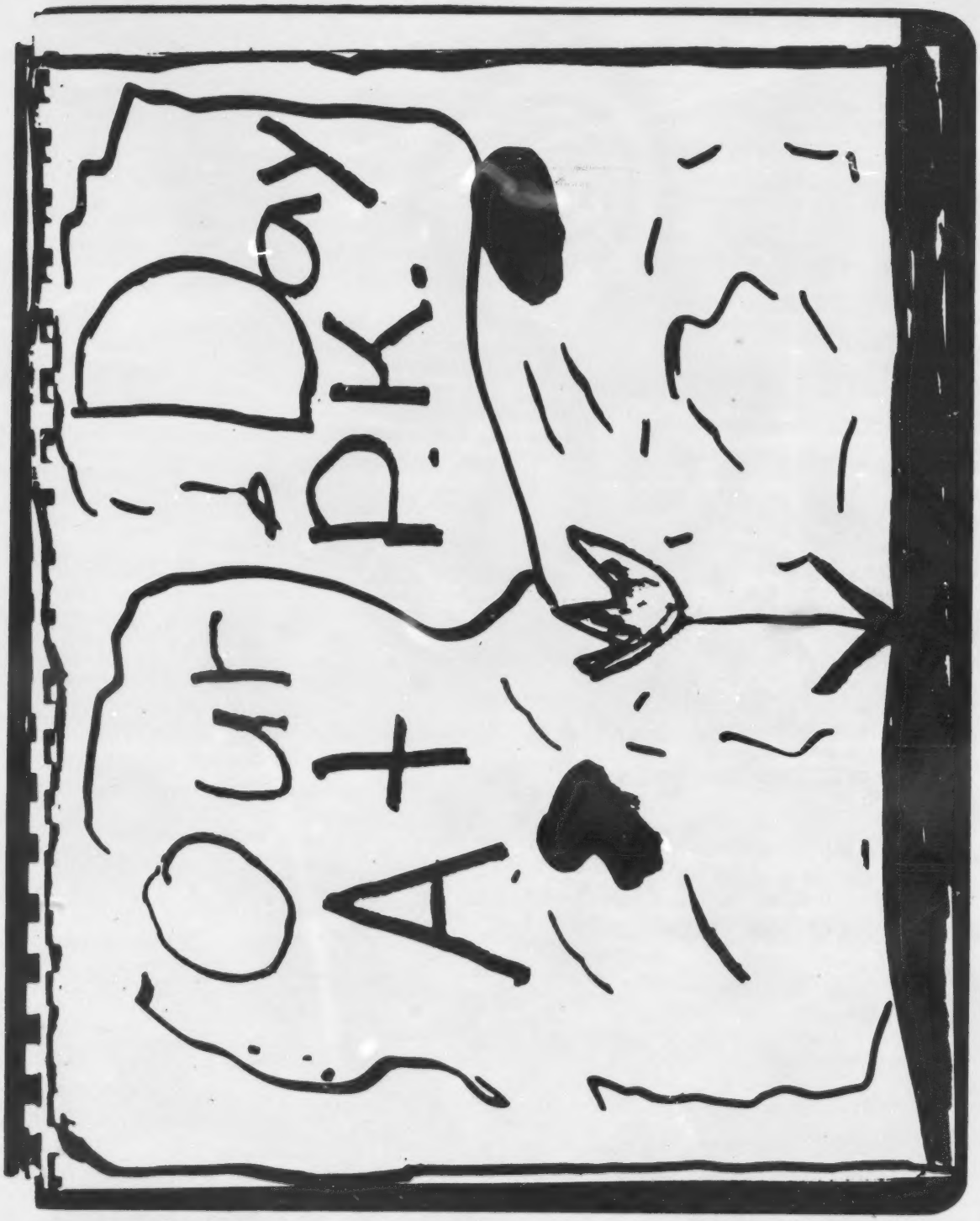
Many people assume that a "professional photographer" is necessary to develop film and print pictures. However, this is not so. A number of alternatives are viable. Develop the film yourself and have prints made only of the ones you and your children select. Since the time, equipment, and skills necessary to develop a roll of black and white film are minimal, you can develop in your kitchen or bathroom. You can teach your teacher's aide to develop film. In fact, with upper elementary children, this part of the photo process can be done in the classroom as a science activity. All you need is someone willing to teach you; most likely audio-visual personnel.

A program in photography can incorporate a variety of visual media. Television and videotape equipment, 8mm and 16mm movie cameras, and any type of camera which produces in black and white or in color are all appropriate for use in activities when the goal or objective is to communicate through images. The selection of the media is determined mostly by its availability and the teacher's resourcefulness. While this particular research project involved only the black and white still photographs made by a variety of cameras, the potential for any and all visual media to become a contributing dimension of educational curriculum are just beginning to be imagined.

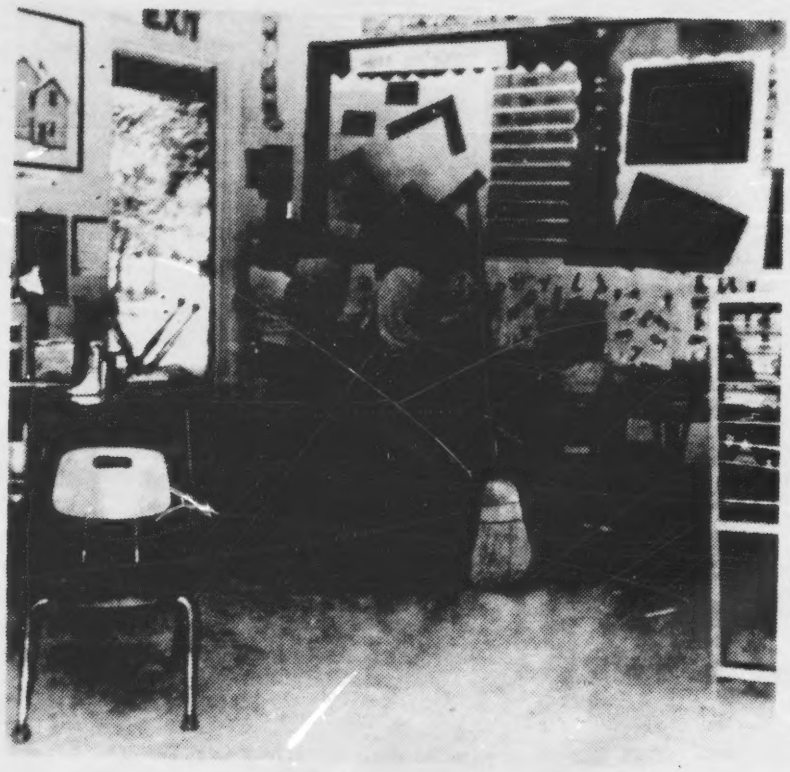
APPENDIXES

APPENDIX A

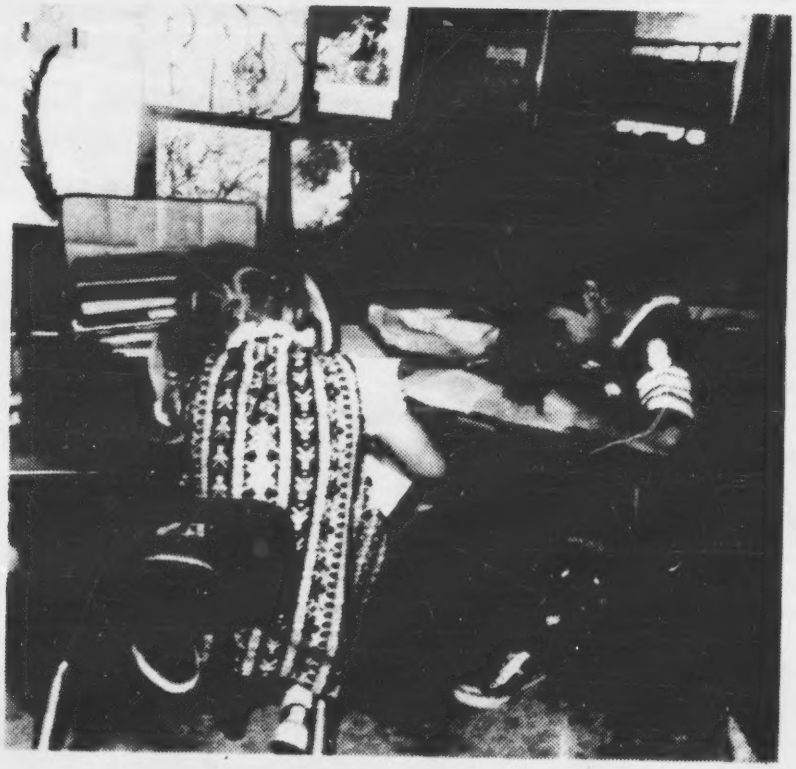
PHOTO BOOK: OUR DAY AT P. K.

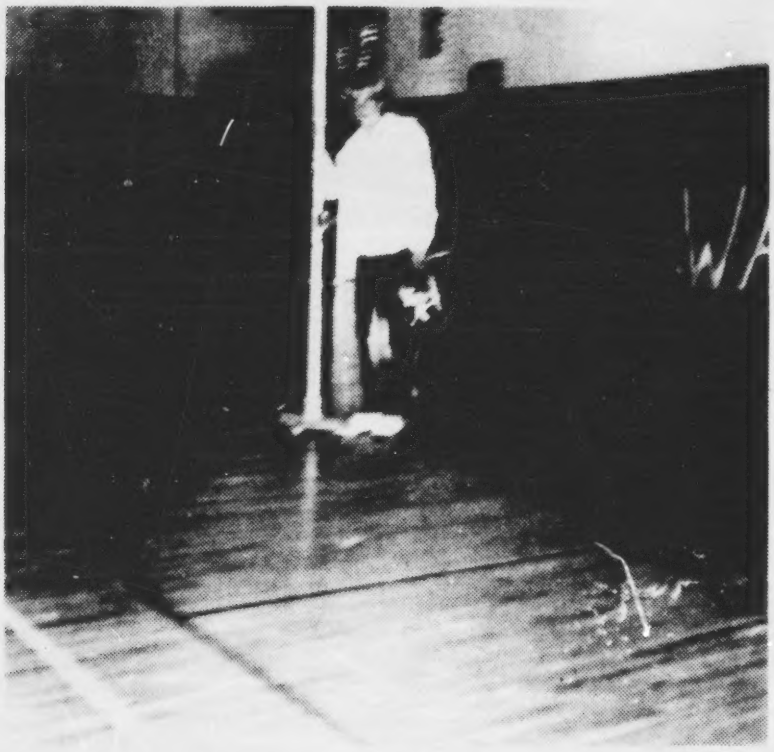


We clean up
our messes!



We work.





We go to
the gym.

We think hard.

We do lots of experiments.

We play.

We go to the creek.

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APPENDIX B

SUGGESTED ACTIVITIES FOR USE OF CAMERAS IN THE CLASSROOM

Children Take Pictures Of. . .

Each Other.--These can become part of biographical sketches or descriptions written about classmates. They can become a book of "My Friends." They can be used along with a class roll to help introduce parents and siblings to classmates.

Events In The Classroom.--These can be compiled along with those by the teacher in a memory book. They can be sent to grandparents or distant friends of the classroom. A child can be given numerous viewpoints to focus on - as an example, you might ask a child to try to show us how Ricky feels when we celebrate his birthday. He can be asked to pictorially tell us about "Christine's Day at P. K." These photographs can be important individually and as a part of a group or sequence.

Special Topics.--These topics can be chosen by the teacher or the child. They can range from an abstract concept such as "Friends" to a specific interest such as "Pets at our School." They can be used as documentary evidence ("This is what the tables look like in the lunchroom when we are through eating") or to inform the viewer of the photographer's specific message ("These are things you should not do on the playground because they are not safe!)

Things at Home.--These photographs are especially important to the photographer because he knows that no one else could take those pictures, and no one else knows much more except what he has told them or shown them. These photographs are highly personal and uniquely individual regardless of the assignment. The child might be asked to "tell us about your home with pictures." He might be asked to show important people, or important places, in his home. He might be asked to tell us about his neighborhood, or compare his home with that of his neighbor's. He might be asked to show us what his siblings do between dinner-time and bedtime in a way so that the viewer can tell the order of events. He may record some special family event or trip. Elements of a child's home will offer many opportunities to photograph.

Classroom Dramatizations.--A small group of children can dramatize an original or familiar story and take photographs or slides of the dramatization to share with the rest of the class, with parents, or with another classroom. These dramatizations can be entertaining or informative. For example, a group of children might act out the proper way to care for the pet rabbit. These photographs could be combined to make a booklet entitled "How to Take Care of Benjamin Bunny" and shared with new class members. A child could dramatize, step by step, how to make a parachute out of a handkerchief; how to plant seeds in the garden; how to tie a shoe, etc.

Field Trips.--These photographs can be taken by a single child, two children with one camera, or by several children with cameras. They can have the purpose of sharing this trip with members of the class who were unable to go, or to record special things they see so that the class can discuss them later. If several children are photographing the same event, they can be asked to photograph different aspects. (One child might be asked to photograph what class members did; another might be asked to photograph important things they saw; another might be asked to show what kind of time the group had; another might be asked to photograph unusual things seen during the trip.) The use of cameras to reinforce and share field trips makes it not only practical but often desirable to send only small groups of children on different field trips. It is no longer imperative that all 30 members of a class go to each and every out-of-class excursion. It is beneficial not only to those in the group that go, but those who remain behind, to share in this way. A small group may go to the home of one class member to bake some bread. They can return to the class with a loaf of bread, photographs of the steps they went through to bake it, and much enthusiasm about the special trip they took to Kim's house.

The rest of the group can become actively involved in sorting through and arranging the photographs as they think they should be; the participating children can then share visually and verbally their experiences with the rest of the group.

The Teacher Takes Pictures Of. . .

Individual Children.--These pictures may be used to label or identify lockers, name tags, or possessions. They can be enlarged to portrait size and put in a class book along with a biographical or autobiographical sketch of each child. They may be displayed in a writing center with questions such as "Who is this person?" "What does this picture tell you about this person?", etc. They may be used along with other information such as weight, height, family members, date of birth, likes and dislikes, etc., to create a booklet for each child - "All About Richard."

The Classroom.--from a variety of viewpoints as well as of specific areas within the classroom. These photographs can be used for children to indicate what areas they are going to work in; they can be accompanied by a list of materials or activities found in each area; children can try to identify from what vantage point each photograph was taken; children can attempt to match verbal description of area of the room with the corresponding photograph.

Any Classroom Event.--this type of photograph can be used in conjunction with language experience charts, a memory book, as a reminder of something special, etc. These photographs can be used to make games and can be handled in many of the same ways as those taken by children. They can be discussed in terms of "What does this photograph tell us about our room and the people in it? Do you like what it says about us? Is it true what the photograph is saying?" These photographs are important ones to begin group discussions about because all of the children are familiar with the subject matter and it is one of great interest to them - it is about them!

Any Event Outside the Classroom.--the teacher can be one of the first to share an event with the class through photographs. The children often enjoy guessing where the teacher was and what she was doing by looking for clues in the pictures she took. This type of discussion could also be in regards to photographs taken by a child.

Additional uses for unfamiliar photographs taken by the teacher include making sequence cards, motivating photographs for creative writing, making puzzles, mystery pictures, "finish the picture" art activities, etc., or for any activity which calls for an unfamiliar photograph.

APPENDIX C

TEACHER-MADE MANIPULATIVES, TOYS, AND GAMES

Puzzles.--These can be made from teacher photographs, photographs by children, magazine pictures, etc. The pieces may be cut in a variety of sizes and shapes, ranging in difficulty. The pictures should include abstract, familiar, and unfamiliar images.

Mixed-Up Pictures.--Photographs can be mounted, cut into several pieces, and mixed with pieces of other photographs. Children will have to sort through pieces and put them back together again. These photographs can be of scenes and events, or of specific objects such as children's faces - with two different faces cut up and placed together in the same container.

Finish the Picture.--Any photograph of an object which is not entirely represented can be clipped to a sheet of drawing paper and then the child can fill in the rest of the picture according to his own interpretation of what the picture is about (for example, a photograph of the lower half of a tree, one half of a person, the side of a building, etc.).

Story Starters.--Any photograph, especially those of events unfamiliar to the children, can have a story starter written on the back of it or can have a question about something going on in the picture which a child can follow up on in his own manner of writing or telling.

Sequence Pictures.--These can range in number from three to thirty. They can show a sequence of time, of events, of attitudes, of growth or other changes, of season, or perspective. They can be of the sort where there is only one possible arrangement or perhaps be of the sort where there are several conceivable arrangements. They can be enlarged to full-page size and arranged on a peg board or they can be small like a deck of cards, and two sets can be mixed together and played like 'Concentration' or "Go Fishing." One set of cards could be put with a timer, with the object of putting the cards in order as fast as possible.

Matching Photographs.--These can be of description and photograph, part and whole, set and subset, opposites, or things which are just alike or alike in some way. (For example, in a learning center on shapes, there can be a group of photographs of things with the shape of a circle, a square, a triangle, a rectangle, etc. These pictures can be classified according to shapes.)

Classifying Photographs.--Containers or areas on a peg board can be labeled with classifications in any area of inquiry and the child or children can sort through the photographs in a given set and put them together with the appropriate classification (i.e., Things that are Big, Things that are Small or Things that I Like, Things that I Don't Like, and Things that I Don't Know, etc.).

Games in other Academic Areas.--can be made by the teacher and children. For example, the teacher can explain to a group of children that she would like to make a game to help teach initial consonants, and ask them to take photographs of objects starting with each "beginning sound." These can be mounted on cards and the children can help make up different ways to use them.

Which One is Different?--A series of photographs can be taken of the same object or situation, with some slight change evident in only one photograph out of three or four. Any perceptual game or device can probably be duplicated or redesigned through the use of photographs taken by the teacher or by children.

VISUAL COMMUNICATIONS ACTIVITIES USING MATERIALS OTHER THAN CAMERAS

Signs and Symbols. . .

Indian Sign Language.--Children can send messages to each other using Indian sign language. They can make up their own Indian names and write them in sign language. They can make up their own sign language, or at least make up additional vocabulary that is not included in the Indian sign language.

Naval Flag Signals.--Children can learn some of these signals and discuss the importance of being understood visually, especially if no other means of communication is available. The class can make up silent signals to use on field trips, and in the classroom or wherever it was advisable to communicate without words.

Traffic Signs and Safety Symbols.--These can be discussed and used within the classroom, and children can make up additional signs and symbols, such as labels on cabinets and drawers, exit and entrance signs, danger signs, and reminder or "how to do" signs.

Maps.--Children can make floor plans of their bedrooms, their neighborhoods, the classroom, the school; they can go on treasure hunts planned by the teacher; they can take turns planning treasure hunts for one another, with only visual clues allowed.

Body Language. . .

Dramatizations.--of stories, books, concepts

Charades.--of feelings, inanimate objects, events

Picture Interpretation.--match up photograph of person with appropriate statement of feeling (i.e., "I was so afraid!" "I was really excited!" "I didn't really want to do it." etc.)

Audio Visuals. . .

Movies or Filmstrips.--watch without sound; make up soundtrack.

LISTEN to soundtrack or record.--make up visuals by drawing or cutting up magazine pictures or taking photographs or dramatization.

LISTEN to story, record, etc.--arrange preselected group of visuals in correct order (i.e., sounds of waking up in the morning - alarm clock going off, yawn, shuffling walk, brushing teeth, water running, "good morning", etc.)

LISTEN to song or poem.--illustrate it with magazine pictures, drawings, or other visuals.

Children's Art Activities. . . through any art media

Drawing to share a personal event

Depicting the ending to a story

Depicting in sequential order a story or event - comic strip style.

Record important events of a field trip - individual or group can discuss trip while drawing - different children can be asked to draw different parts of a group experience.

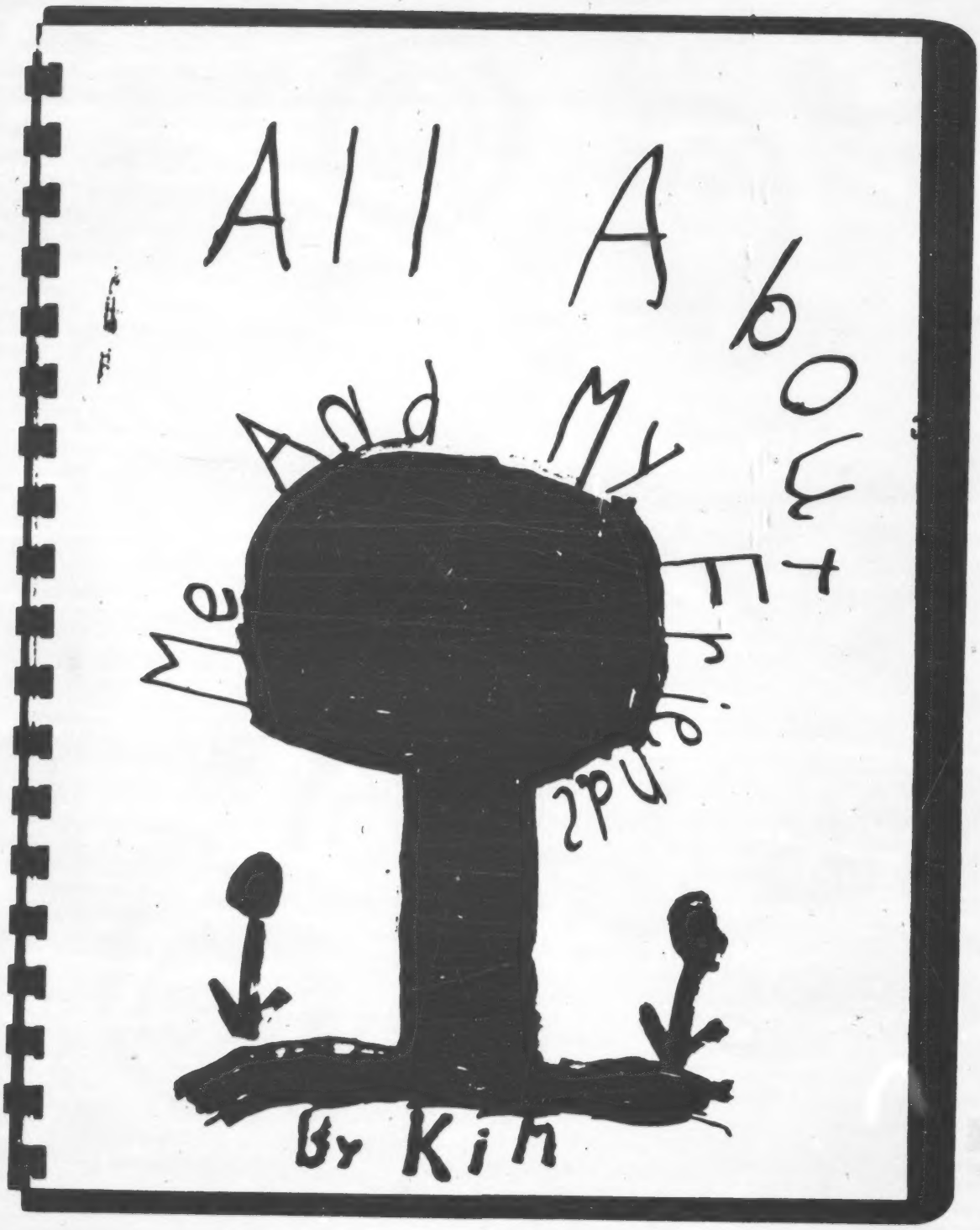
Mystery description - child listens to description and then tries to reproduce visually (clay, paint, etc.) a replica of what he heard. This may also be a written description.

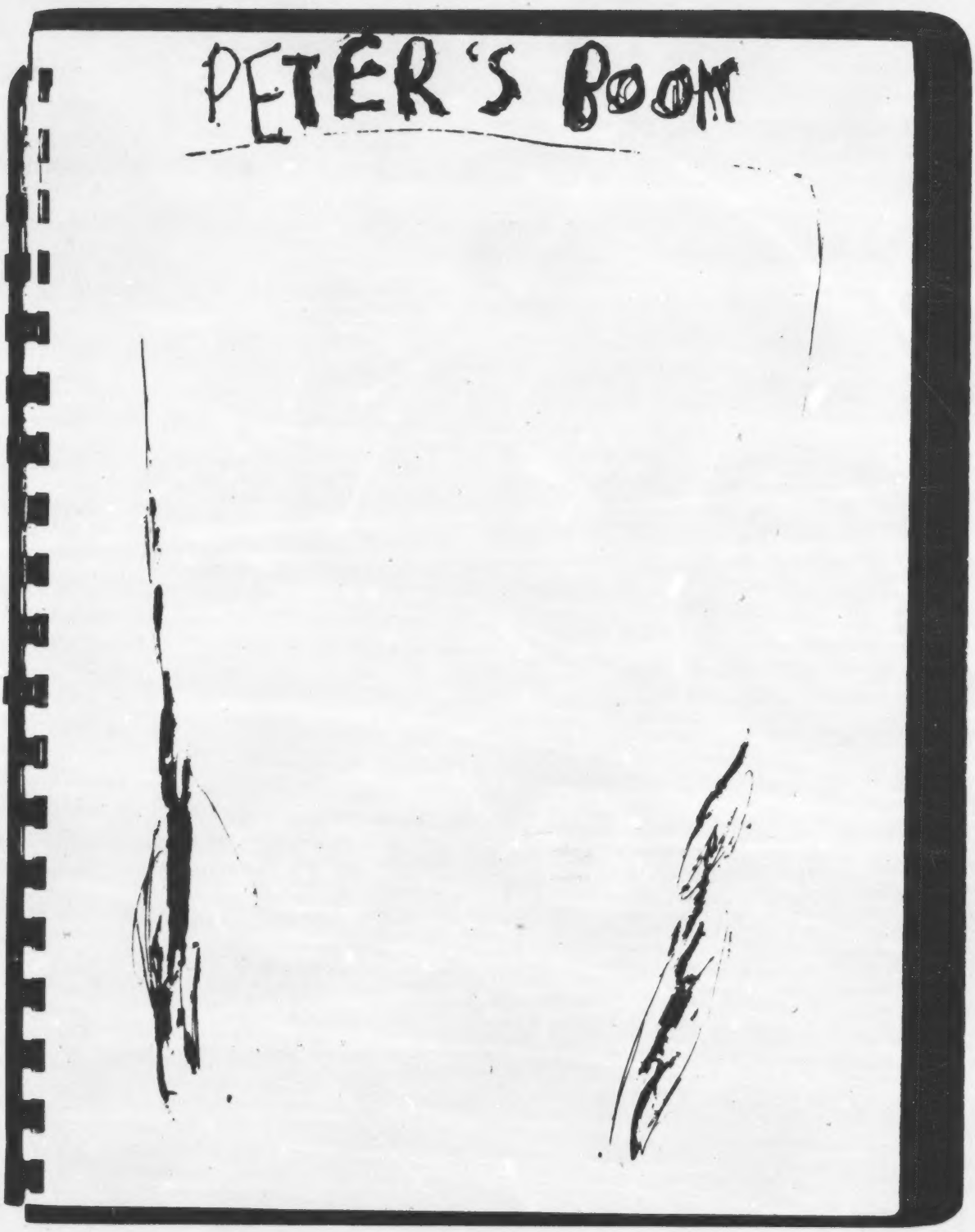
Express different feelings through choice of media, through choice of color, or ways of working with media (especially with a manipulative medium such as clay).

(It is important to emphasize the necessity of reinforcing any child's explorations with art media in ways so that he feels comfortable and not pressured to produce a product. A child can benefit from constructive questioning such as "I can see that the person is running, but I am not sure where he is going" because he can always add to his picture. It is often the process of working with the medium that is meaningful to the child, and the product may not always be as important. A child who is talking and coloring at the same time about something meaningful and exciting may color over areas after he has discussed them, or change directions in his picture as he continues talking. The verbal and visual interaction have stimulated further thinking, however, and both have helped the child express himself better than either in exclusion of the other would have done.)

APPENDIX D

PHOTO BOOK TOPICS

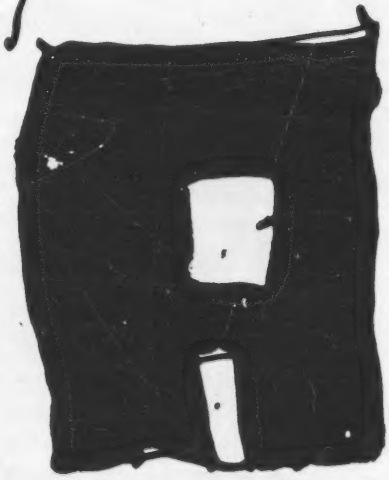



PETER'S BOOM

All About Things

By Joel Pearson

All About my house



By Debbie

Morning Side Park

Roland ↑
Craig ↓

REFERENCES

Debes, John L. "The Eyeful Power." Presentation at the National Convention of the Association for Educational Communications and Technology, Dallas, Texas, April 1975.

Debes, John L. Loom of Visual Literacy. AV Instructor, vol. 14:25-27, October 1969.

Fillion, B. Visual Literacy. Clearing House. (January, 1973), 47, p. 308-311.

Postman, Neil and Weingartner, Charles. "Teaching as a Subversive Activity." New York, Delacorte Press 1969.

Purvis, J. R. "Visual Literacy: An Emerging Concept." Educational Leadership. (May, 1973), 30, p. 714-716.

Williams, Clarence M. and Debes, John L. eds. National Conference of Visual Literacy, 1969. New York: Pitman, 1970.